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## Master Thesis

# Exploring Early Leader Careers: A study of Personality, Motivation to Lead and Self-Efficacy as possible predictors of Leader Emergence.

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## **Abstract**

The purpose of this study was to examine and gain further knowledge of how and to what degree young individuals are influenced by the factors Personality, Motivation to Lead and Self-Efficacy when emerging into leadership positions. The empirical research was conducted as the second part of a longitudinal study among previous students from a Norwegian Business School. A total number of 640 respondents participated in the survey, were 623 of them were compatible with the personality profiles that were measured at time one in 2006 and 2007. The results of this study showed that Personality is only partially related to Leader Emergence among young individuals, as only two out of five personality traits was found to be statistically significant, namely Neuroticism and Extraversion. Personality was also found to be somewhat related to MTL (time 2), as not all of the personality traits are statistically significant on all of the MTL components. Further, the MTL component Affective-Identity (time 2) was the only factor that was found to mediate the relationship between Personality and Leader Emergence. Further, the study found that only Conscientiousness had a significant relationship with Self-Efficacy in young leaders. Lastly, it was found to exist significant differences in the mean scores between leaders and non-leaders in the variables Affective-Identity MTL (time 1 and 2) and Self-Efficacy. However, only Affective-Identity MTL (time 2) was found to be a significant predictor of Leader Emergence.

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## Introduction

The term leadership has been a topic of discussion among researchers and professionals for decades. It leads us all the way back to great kings and emperors, and the belief that leaders are chosen by god, or simply born to lead. The word leadership has been adopted from our general vocabulary and put into a scientific context without being accurately redefined, which has resulted in a certain vagueness in the real meaning of the word (Yukl 2010). The difficulties in defining the concept of leadership are also related to the complexity of it, in which an understanding of what it contains and how it operates might be hard to generalize using a universal definition of the term (Alvesson and Svenningsson 2003). In 1974, Stogdill concluded that “there are almost as many definitions of leadership as there are persons who have attempted to define the concept” (259). Even so, most definitions of leadership seem to assume that it involves a process of intentional influence over individuals, a group, or an organization, while guiding and facilitating activities (Yukl 2010).

In general, leadership can be analyzed on the two levels of leader emergence and leader effectiveness. While leader effectiveness refers to the degree of influence a leader has on his or her subordinates, leader emergence relates to the group phenomenon of which individuals that become leaders within a group (Judge, Bono, Ilies and Gerhardt 2002). The source of leadership, why someone becomes leaders while others do not, seems to have more to it than individuals simply being born to lead. Research on leader emergence has therefore focused on determining if there exist individual differences that are able to predict leader careers. Variables of interests have been concerned with both genetics as well as the developmental aspects of individuals, such as personality, motivation, self-efficacy and experiences, suggesting that leadership to a greater extent is a developed and learned skill, rather than a biological determined path (Yukl 2010). This perspective on leadership is summarized by Conger (2004), citing that “it is not a matter whether leaders are born or made. They are born and made” (136).

The discussion whether leadership is possible to predict from a genetic and/or developmental perspective is continuously up for debate. Research has been providing different results, as well as a tendency to focus on either nature or nurture. In recent years the direction of focus have to a larger degree been able to

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combine and see valid connections between the heritable and developmental factors that seems to affect processes of whom that emerge into leadership positions.

The purpose of this study is to investigate further the connection between the variables Personality, Motivation to Lead (MTL), Self-Efficacy and the influence they have on the Leader Emergence of young professionals in a Norwegian context. Examining to what extent these variables have an individual and/or combined effect on leadership emergence will help increase our theoretical understanding of what causes leader emergence and the behavior of leaders. There has in general been little research on what factors that cause leader emergence behavior, and how they interact. This study will therefore try to enhance the theoretical knowledge of leader emergence and of what triggers this type of behavior in young individuals. The study does also have important practical implications. Increased information of what type of individuals that are most likely to emerge as leaders will be highly applicable in recruitment and selection settings, as well as for leadership and organizational development programs. Both organizations and individuals should have an interest in knowing which individuals that are likely to become leaders, as the nature of this behavior is likely to influence a persons leadership ability, behavior and effectiveness.

Our research question is on this basis stated as follows:

*“What predicts early leader careers?”*

### **Personality**

The construct of personality has been given much attention in the leadership literature. One of the many reasons is due to the possible implications it has shown to have with leader emergence and effectiveness.

Personality can be defined as “a dynamic organization, inside the person, of psychophysical systems that can create the person’s characteristic patterns of behavior, thoughts, and feelings” (Allport 1961, 28). A person’s behavior can therefore often be observed to show somewhat consistency over time and situations. Through the perspective of consistency, theory of personality traits has

been developed in order to understand and characterize how individuals respond to the world around them (Passer and Smith 2007).

Throughout the last thirty years the Five-Factor model, or the Big Five, has shown to have an overall high validity, and has become an established theory in the research of personality traits (Martinsen, Nordvik and Østbø 2011). The Five-Factor model describes the most prominent aspects of personality traits (Goldberg 1990), and the main five factors are Openness to Experience, Conscientiousness, Extraversion, Agreeableness and Neuroticism. A high score on the five factors would insinuate the following results (Cooper 2010):

*Openness to experience:* Imaginative, moved by art, emotionally sensitive, novelty seeker and tolerant.

*Conscientiousness:* Competent, orderly, dutiful, motivated to achieve, self-disciplined, and thinks before acting.

*Extraversion:* Warm, gregarious, assertive, active, excitement seeker, and positive emotions.

*Agreeableness:* Trusting, straightforward, altruistic, cooperative, modest and tender minded.

*Neuroticism:* Anxious, angry, hostile, depressed, self-conscious, impulsive and vulnerable.

The structure of the five-factor constructs has through research shown to have a cross-cultural generalizability in many countries, including Norway (Martinsen, Nordvik and Østbø 2011). Personality traits of the Five-Factor model also demonstrate a certain heritability and stability over time (Digman 1989). The different constructs of the Five-Factor model are usually measured by using the NEO PI-R (Costa and McCrae 1992), which is likely the most important instrument utilized today when measuring personality (Martinsen, Nordvik and Østbø 2011)

### ***Personality and its linkages to leadership***

There has been inconsistencies in the research of the role personality plays in predicting leadership, but today research have shown reliable correlations between



personality traits and leadership, supporting Cowley, who as early as in 1931, stated that “the study of leadership will always be through the study of traits” (144). A meta-analysis by Judge and colleagues (2002) revealed a multiple correlation of .48 with the Five-Factor model and leadership emergence and effectiveness, indicating a relatively strong relationship between personality and leadership.

In Judge et al.’s (2002) study of leader emergence and effectiveness, results indicated that the five personality traits to a certain degree predicted leader emergence better than leader effectiveness. An interesting result of their research displayed that the rank order of the different traits varied in their influence on the different analysis levels of leadership. The personality traits indicating the strongest correlation with leader emergence were: Extraversion, Conscientiousness and Openness to Experience. As for leader effectiveness, the traits Neuroticism, Extraversion and Openness to Experience showed correlations that supported earlier studies (Judge et al. 2002). Even though singular personality traits demonstrates significant relationships with leadership, Derue, Nahrgang, Wellman and Humphrey (2011) found that leader behavior explained more of the variance in leader effectiveness than leader traits. Nevertheless, the result did indicate that leader behaviors mediated the relationship between personality traits and leader effectiveness.

When taking each of the specific traits into consideration, *Extraversion* came through as the trait showing the highest consistency and correlation with leadership (.31) (Judge et al. 2002). It is therefore likely to assume that Extraversion is an important trait for leaders to possess. The trait had also a stronger relationship with leader emergence than with effectiveness, which can be explained by that when trying to emerge as a leader in a group one are likely to be more successful when being dominant and sociable, which are two of the underlying facets of Extraversion (Judge et al. 2002).

Similarly, *Conscientiousness* also showed a stronger correlation with leadership emergence than with effectiveness, and were also the trait, after Extroversion, that showed the strongest overall correlation with leadership (.28). Though, when using the *N*-weighed correlations in a multivariate analysis, Conscientiousness

showed the strongest relationship with leadership in two out of the three regressions made (Judge et al. 2002). As people scoring high on Conscientiousness usually tend to be persistent and value structure and planning, which most likely are contributing to a high task competence, it may make it easier for conscientious individuals to quickly emerge as leaders (Judge et al. 2002). The trait *Openness to Experience* also revealed a strong relationship with leadership. Despite the results found, it is important to be aware of that Openness to Experience is the trait in the Big Five model that is the most ambiguous and least understood. Except from the two underlying facets creativity and sociopolitical attitudes, related criteria's to Openness to Experience have been few (Judge et al. 2002). According to McCrae (1987), Openness to Experience plays a significant part in divergent thinking, which is an important aspect of creativity, and has shown to have a significant value in terms of effective leadership (Sosik, Kahai and Avolio 1998). Judge and colleagues (2002) found that Openness to Experience had an overall correlation with leadership of .24, and a correlation of .21 with leader emergence. Derue et al. (2011) argues that Openness to Experience constitutes an important side of developing task competence, in which have been demonstrated to be an important aspect of leadership. The findings may be viewed as highlighting the importance of possessing skills within the Openness trait, such as being imaginative, curious, and open minded in work settings when emerging as or being in a leadership position (Derue et al. 2011).

The trait *Neuroticism* displayed an overall negative correlation with leadership of -.24, indicating that being emotionally unstable is not a favorable trait for leaders to possess (Judge et al. 2002). Individuals that have a high degree of emotional stability are therefore more inclined to enter leadership positions, and handling challenging tasks more effectively (Derue et al. 2011). Moreover, the trait *Agreeableness* demonstrated the lowest relevance with leadership of all of the Five-Factor traits. In terms of leader emergence, Agreeableness only showed a correlation of .08, insinuating that the relevance Agreeableness has with leadership emergence is very low. As agreeable individuals often are indulgent and passive, leader emergence seems less likely (Judge et al. 2002). Nevertheless, the correlations between Agreeableness and leadership varied depending on the leadership criteria and setting measured. The correlations when measuring the leader effectiveness criteria showed a correlation of .21. As agreeable individuals

tend to be sensitive towards others, friendly and approachable, it is likely that when being in a leadership position their relational focus will enhance their effectiveness as a leader, which also is supported by Derue and colleagues (2011) who found that agreeable individuals improved group performance when leading them.

Based on the meta-analytic correlations Personality have demonstrated to have with Leader Emergence, we predict similar results in our study of leader emergence in early careers, resulting in the following hypotheses:

*Hypothesis 1:* Personality predicts leader emergence in early careers.

*Hypothesis 1a:* Extraversion will have a positive relationship with leadership emergence in early careers.

*Hypothesis 1b:* Conscientiousness will have a positive relationship with leader emergence in early careers.

*Hypothesis 1c:* Openness to Experience will have a positive relationship with leader emergence in early careers.

*Hypothesis 1d:* Neuroticism will have a negative relationship with leader emergence in early careers.

*Hypothesis 1e:* Agreeableness will not have a significant relationship with leader emergence in early careers.

### ***Genetic linkages to leadership***

In recent years the study of leader emergence has not only been addressing linkages between certain personality traits and leadership. As personality traits tend to be stable over time the genetic factor of heritability of personality traits have been well studied and established over the years (Arvey, Rotundo, Johnson, Zhang and Mcgue 2006). According to the National Merit Twin Study, the heritability of genetic factors was shown to explain up to 50 percent of the

variance of the Big Five personality traits (Loehlin, McCrae, Costa and John 1998). The established relationship between personality traits and leadership makes it therefore likely to assume that genetic factors also have an influence in which individuals that are more likely to emerge as leaders. Ilies, Gerhardt and Le (2004) found that the likelihood of emerging as a leader is to a great extent explained by genetic differences. Their result showed that the Big Five traits, intelligence and leader emergence had a strong multiple correlation of .57, and that personality traits was a stronger predictor of leader emergence than the construct of intelligence was. Though, the authors argue that their results are conservative, in sum their results indicated a partial heritability of leader emergence of 30 percent (Ilies et al. 2004). Further, several twin studies has been conducted in order to examine to what degree genetics influence leadership, and to a larger extent be able to control the shared environment that most twins share. The results in these studies have revealed an even greater genetic influence on leader emergence than previous studies, indicating that the associated variance of heritability in leadership role occupancy were 30 percent in male twin sample (Arvey et al. 2006), and 32 percent in a woman twin sample (Arvey, Zhang, Avolio and Krueger 2007).

Though genetic influences account for a sizable portion of leadership variance, the remaining 70 percent of the background for leader emergence are yet to be explained. As 30 percent may be described by nature and genetic factors, the existing 70 percent are likely to be accounted for by nurture and environmental factors in an individual's life (Arvey et al. 2007). Arvey and colleagues (2006) argues that environmental factors are substantially important in determining leadership. This is also highlighted by Riegel (1975, 106), suggesting that "human development can only be understood by conceiving the emergence of behavior over time as a result of an ongoing exchange between the organism and the environment". It is for that reason of great interest to investigate further what motivates and what type of environmental experiences that to the greatest extent may predict leader emergence, and the ways in which these motivations and experiences possibly interact and/or correlate with genetic factors.

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## Motivation

The study of motivation is important in order to be able to understand the nature of individual behavior, why it is activated and why it has a certain direction (Bobbio and Rattazzi 2006). Motivation is defined as “a cognitive decision-making process through which goal-directed behavior is initiated, energized, directed and maintained” (Buchanan and Huczynski 2010, 267). Being able to understand the motives and motivations of individuals to move into leadership positions may provide a further understanding of both the effect and to what degree motivation influences leader emergence. Chan and Drasgow (2001) developed the construct MTL in order to understand how individual differences of motivation influence the effort to become and continue in leadership positions.

### *Motivation to lead*

MTL is defined as “an individual differences construct that affects a leader’s or leader-to-be’s decisions to assume leadership training, roles, and responsibilities and that affect his or her intensity of effort at leading and persistence as a leader” (Chan and Drasgow 2001, 482). This approach towards MTL assumes that individual differences in MTL can interact and predict leadership behaviors. This suggests that individual differences in MTL can change in accordance with leadership training and experience. According to Chan and Drasgow (2001), an individual’s leadership skills and leadership style are learned and therefore MTL can develop and change over time and experiences.

The construct and theory of MTL is based on Fishbein and Ajzen’s (1975) theory of Reasoned Action and Triandis’s (1980) theory of Interpersonal Behavior. In the theory of Reasoned Action, the intent to act is based on individual attitude concerning outcome valence and perceived social norms, while the theory of Interpersonal Behavior uses cognition, affect, social norms and personal norms to explain behavior. The three determinants of a person’s social behavior (attitude/affect, cognition, norms) were used to construct three components underlying individual differences in MTL (Chan and Drasgow 2001). Some individuals might lead simply because they like to lead others (i.e., Affective-Identity MTL) whereas others would lead because of a responsibility or a sense of duty (i.e., Social-Normative MTL). It is also possible that individuals do not take

a rational decision to become a leader (i.e., Non-Calculative MTL). The Non-Calculative MTL component refers to that it is possible that an individual only takes on leadership roles if they are not calculative in the cost effectiveness of leading relative to the benefits. The less a person calculates the costs and benefits when leading others, the less he or she avoids the leadership role (Chan and Drasgow 2001).

One of the key assumptions in Chan and Drasgow's (2001) individual differences theory is that non-cognitive constructs, such as personal values and personality, relate to the individual's leader behavior through the MTL. This affects the individual's participation in leadership roles and activities, and it is in these activities that the individual attain social skills, useful experiences and knowledge about leadership style. It is based on this that the leadership style and ability are learned and that the MTL can alter throughout the life.

The MTL measure developed by Chan and Drasgow (2001) was a 27-item self-report instrument, where their results showed that the three MTL components had its own distinctive set of antecedents which were found to be generally consistent across three different samples which represented different cultural and occupational contexts and gender groups. The results they found provided both good internal consistency reliabilities and construct, external, incremental and predictive validity for the measure.

The psychometric properties and validity of the items have been investigated in later studies (Bobbio and Rattazzi 2006; Nordgård and Farstad, 2011). Bobbio and Rattazzi (2006) examined the psychometrics, reliability and validity of the MTL instrument developed by Chan and Drasgow (2001) using an Italian version in an Italian context. They found three factors that were consistent in meaning with the factors Chan and Drasgow (2001) found. Their results indicated that the measure should be shortened down to a 15-item instrument in order to obtain a satisfying model fit resulting in acceptable but not perfect model fit indexes and reliability. Different patterns of correlations was found between the MTL sub-scales in Bobbio and Rattazzi's (2006) results, which might indicate that there are issues when it comes to the influence of socio-cultural variables. They also found correlations between the Social Desirability Scale and MTL. This suggests that

one should be cautious when using this instrument and considering the results, especially when using the results for professional assessment or personnel selection situations, as these situations are vulnerable to impression management modalities. Even though there were some problematic issues regarding their results, they concluded that the MTL instrument can be considered as a useful research instrument in personality-, social- and organizational psychology by providing a cost- and time conscious instrument that is quick to administer (Bobbio and Rattazzi 2006).

As the two mentioned studies (Chan and Drasgow 2001; Bobbio and Rattazzi 2006) found different results, both when it comes to the amount of items and the pattern of correlations between the MTL components, Nordgård and Farstad (2011) examined a Norwegian version of the MTL scale which is based on a Norwegian sample. This measure was used by two associate professors at BI, Øyvind Martinsen and Jan Ketil Arnulf, and they reduced items from Chan and Drasgow's (2001) 27-item measure, resulting in the Norwegian version, which is a 15-item measure with 5 items per MTL component. Nordgård and Farstad (2011) found that the three factors, Affective-Identity MTL, Social-Normative MTL and Non-Calculative MTL, correlated which is consistent with earlier findings (Chan and Drasgow 2001; Bobbio and Rattazzi 2006). After item deletion and item aggregation Nordgård and Farstad's (2011) analysis resulted in a model with three indicators per component, producing a 9-item model, resulting in the shortest MTL instrument compared to previous studies. The model obtained a good model fit and cross validations. As with the two other studies, (Chan and Drasgow 2001; Bobbio and Rattazzi 2006) each of the MTL components had its own unique set of antecedents, which imply construct validity of the MTL model. Even though the results indicated a good model fit (that the model fit the data), some of the relationships were not consistent with previous research, and hard to explain, also making the construct validity difficult to explain. The relationship between the components Non-Calculative MTL and Social-Normative MTL were not statistical significant, and inconsistent with Chan and Drasgow's (2001) results, which influences the internal consistency negatively. It may seem like the MTL instrument does not measure a second-order general MTL construct that accounts for the variance within the three first-order factors, which it according to theory should. The results showed that the Norwegian MTL scale has both

strengths and weaknesses, and one should treat the results with caution, as it is a modified measure (Nordgård and Farstad 2011).

Comparing the three studies (Chan and Drasgow 2001; Bobbio and Rattazzi 2006; Nordgård and Farstad 2011) one can see that none of the three studies show the same results. Bobbio and Rattazzi (2006) explained that their results might be different from Chan and Drasgow's (2001) because of socio-cultural factors and samples from different countries and cultures. The inconsistency in the results may be a threat to Chan and Drasgow's (2001) theory that hypothesize that the three MTL components should be positively correlated (Nordgård and Farstad 2011).

### ***Motivation to lead and personality***

As Chan and Drasgow (2001) mentions, personality can to a certain degree answer the question of why people want and seek leadership. Their results indicate that personality, values and leadership experience are related both directly and through leadership self-efficacy to MTL. An individual's personality influences behavior and therefore also affects motivation (Carver and Scheier 2008). Even though the opportunity to lead is present, leadership will most likely not occur without MTL, suggesting that MTL is essential for leadership emergence (Chan and Drasgow 2001).

As Chan and Drasgow (2001) found, each of the three MTL components have different personality antecedents and all of the Big Five factors are related to MTL. Extraversion is found to have a positive relationship with the factor *Affective-Identity MTL* suggesting that individuals high on this factor tend to be outgoing, ambitious and assertive, which all are underlying facets of the trait Extraversion (Judge et al. 2002). Such individuals might see themselves more as leaders compared to low score individuals. It is likely that these individuals also enjoy working closely with other individuals. The trait Neuroticism was not found significantly related to this MTL factor in both Chan and Drasgow's (2001) and Nordgård and Farstad's (2011) study, which may be explained by the negative correlation Neuroticism have shown to have with leadership (Judge et al. 2002). The traits Openness to Experience and Conscientiousness was in the latter study



found to be antecedents to Affective-Identity MTL, with small relationships. Chan and Drasgow (2001) found that both traits have an indirect positive relationship to the MTL factor. Lastly, Agreeableness was found to have a negative relationship with Affective-Identity MTL. According to Judge and colleagues (2002) Agreeableness is the least relevant of the personality traits in terms of leadership.

Studies have found that Extraversion do not have a statistical significant relationship with the MTL factor *Non-Calculative* suggesting that individuals high on this personality trait do not tend to calculate the benefits/costs with leadership more or less than individuals that score low on this trait (Chan and Drasgow 2001; Nordgård and Farstad 2011). Furthermore, both Agreeableness and Neuroticism is found to be antecedents to Non-Calculative MTL. Individuals high on Agreeableness are likely to lead because of their agreeable disposition and not because they expect something in return for leading others. Neuroticism may be an antecedent to the factor because individuals who score high on this trait often will find it demanding and worrying to lead others due to the high responsibility that comes with it. Such individuals must therefore receive benefits in order to take on these positions (Chan and Drasgow 2001; Nordgård and Farstad 2011). Nordgård and Farstad (2011) also found that Conscientiousness and Openness to Experience were antecedents to the Non-Calculative MTL. These results were inconsistent with previous research (Chan and Drasgow 2001).

The last MTL factor, *Social-Normative MTL*, was by Chan and Drasgow (2001) found to have positive relationships with the traits Conscientiousness and Agreeableness. Individuals who score high on this factor would therefore also score high on the trait Conscientiousness as they follow rules and duties more than individuals who score low. They are also likely to be trusting and accept the status quo. However, Nordgård and Farstad's (2011) results were mostly inconsistent with previous findings (Chan and Drasgow 2001). The only consistent finding was that Openness to Experience was not an antecedent to the Social-Normative MTL suggesting that people high in Openness to Experience are not motivated to lead because of feelings of responsibility or duty. They also found that Extraversion was an antecedent to this factor, while Chan and Drasgow (2001) only found that the trait had an indirect relationship with the Social-Normative MTL. Nordgård and Farstad (2011) explain that this relationship might

exist because highly extraverted individuals are to a bigger extent used to be in leadership positions and therefore have more positive attitudes towards leading in comparison with more introverted individuals. They might also feel more social responsibility to lead based on their social confidence relative to introverts. They also found that Neuroticism was an antecedent to the Social-Normative MTL that Chan and Drasgow (2001) did not find. Individuals high on Neuroticism might feel a large pressure to accept such positions resulting them in not daring to decline the responsibility of such positions because of a fear of social punishment (Nordgård and Farstad 2011). Lastly, Nordgård and Farstad's (2011) result did not yield support to Chan and Drasgow's (2001) findings of Agreeableness and Conscientiousness being antecedents to the Social-Normative MTL.

Based on the previous research we anticipate to find a significant relationship between Personality and MTL (time 2) in our study:

*Hypothesis 2: Personality influences an individual's MTL.*

*Hypothesis 2a: Personality will have a significant relationship with the MTL component Affective-Identity.*

*Hypothesis 2b: Personality will have a significant relationship with the MTL component Social-Normative.*

*Hypothesis 2c: Personality will have a significant relationship with the MTL component Non-Calculative.*

### ***Motivation to lead and leader emergence***

Traditionally leader emergence have been studied and examined as an outcome of traits and genetics (Hong, Katano and Liao 2010). In order to be able to understand the behaviors and influence of emergent leaders, it is important to understand an individual's motivation (Judge, Piccolo and Kosalka 2009). In this context, it has been hypothesized that MTL may be the most direct mediator of leader emergence (Hong, Katano and Liao 2010). Hong, Katano and Liao's (2010) study showed that MTL could be considered a proximal predictor for

leader emergence, suggesting that individuals high on MTL tend to emerge as leaders more than individuals low on MTL. The different components of MTL give different levels of predictive value in different settings. Individuals that score high on the Affective-Identity MTL were more likely to emerge as leaders as people that score low on this MTL factor, especially in leaderless group situations. Social-Normative MTL was found to influence the leader emergence of individuals in teams, suggesting that this MTL component is related to leader emergence. In contrast to the two other MTL components, results did not find the Non-Calculative MTL factor to be related to either past leadership experience or leadership self-efficacy. This may indicate that individuals who score high on this component values harmony and tend to avoid conflicts that often occur in leadership roles, and are therefore not motivated to emerge into leadership positions. The results from the study showed that different situations might be influenced by different MTL components, suggesting that managers should pay attention to different aspects of MTL for different settings and positions. This confirms the author's prediction that MTL is an important construct for leader emergence in different settings (Hong, Katano and Liao 2010).

Based on the theory above, we hypothesize the following:

*Hypothesis 3: Affective-Identity MTL (time 1 and 2) and Social-Normative MTL (time 1 and 2) will mediate the relationship between Personality and Leader Emergence.*

### **Self-Efficacy**

Over the past 20 years, self-efficacy has become a widely studied variable in psychological and organizational sciences. Self-efficacy is defined as an individual's belief in his or hers capabilities to activate the motivation and cognitive and behavioral actions needed to perform in a given situation (Bandura 1997). In this manner, self-efficacy is a situation specific competence belief and researches have found that self-efficacy are connected to and predicts important work-related outcomes such as job performance (Stajkovic and Luthans 1998; Judge, Jackson, Shaw, Scott and Rich 2007) and job attitudes (Saks 1995). According to Bandura (1997) the beliefs begin to form early in childhood when children encounters with a wide variety of tasks, situations and experiences.

Within Bandura's (1977) social cognitive theory, expectations of self-efficacy are rooted in four major sources of information. The first source is *performance accomplishments*, which are based on personal mastery experiences. The most effective way of developing a strong self-efficacy is through mastery experiences, and therefore success in what you do raises the mastery expectations and failure will lower them. Once an individual have established mastery experiences, an enhanced self-efficacy tend to generalize to other situations where performance is based on deliberate efforts. Individuals do not solely rely on their own mastery experiences when the self-efficacy is developed. Many expectations are derived from *vicarious experiences*, which involves witnessing other individuals successfully perform difficult activities. Observing that other people are successful in their attempts will result in persistence and improvements in their efforts and increased performance capabilities. The third source of self-efficacy is *verbal persuasion* were people are persuaded, though suggestion, into believing that they have the capabilities and skills to cope successfully with what has overwhelmed them previously. Verbal encouragement from others decreases ones self-doubt and increases the individual's effort at the given task. Lastly, the self-efficacy is affected by *emotional arousal*. The emotional reactions and responses to given situations also influences the self-efficacy. People are affected by their moods, emotional states, stress levels and physical reactions and this can impact how an individual perceives his or her personal abilities in a specific situation (Bandura 1977).

### ***General self-efficacy***

Bandura's (1997) situational definition of self-efficacy has given the construct a narrow focus resulting in researchers limiting their research of self-efficacy as a task-specific or state-like construct (SSE). Researchers have therefore become interested in a more trait-like generality dimension of the concept resulting in a derivate of self-efficacy, namely general self-efficacy (GSE) (e.g., Eden 1988; Judge, Erez and Bono 1998; Judge, Locke and Durham 1997). GSE is defined as an "individual's perception of their ability to perform across a variety of situations (Judge, Erez and Bono 1998, 170). GSE is therefore a situation-independent competence belief where individuals view themselves as capable of reaching task demands in a many different contexts.

It have been suggested that SSE is a motivational state, while GSE is a motivational trait (Judge, Erez and Durham 1997). They therefore have similar antecedents (e.g., performance accomplishments, vicarious experiences, verbal persuasion, emotional arousal). However, the GSE is more stable and therefore more resistant to temporary influences than SSE. GSE emerges during an individual's lifetime as one experience and collects successes and failures across different settings (Shelton 1990). Thus, an accumulation of mastery experiences, positive vicarious experiences, verbal persuasion and emotional arousal increases the GSE (Chen, Gully and Eden 2001). Researches have also found that GSE are strongly related to self-esteem, locus of control, neuroticism (Judge, Locke and Durham 1997) and other motivational traits, such as need for achievement and conscientiousness (Chen, Gully and Eden 2001), suggesting that high GSE are related to both personality and MTL. Individuals with a high GSE are valuable resources for organizations as it might maintain the employees motivation for work and success in the given tasks when experiencing stressful and changing job demands and circumstances that could lead to a failure (Chen, Gully and Eden 2001). Based on this, self-efficacy has been closely linked to the constructs personality, leadership, motivation and experience in several studies (Judge et al. 2007; Hendricks and Payne 2007; Chen and Drasgow 2001). Judge et al. (2007) found that the personality traits Conscientiousness, Extraversion and Neuroticism significantly influenced individuals Self-Efficacy, and it is therefore likely that the self-efficacy of young leaders will be influenced by their personality. Langston and Sykes (1997) also found results showing that the Big Five traits correlate with individual beliefs, suggesting that personality also are linked to self-efficacy beliefs.

Based on theory of how Personality are found to be related to Self-Efficacy, we propose the following:

*Hypothesis 4:* Personality will have a significantly relationship with Self-Efficacy in young leaders.

*Hypothesis 4a:* The personality traits Conscientiousness and Extraversion will have a significantly positive relationship with Self-Efficacy of

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young leaders.

*Hypothesis 4b:* The personality trait Neuroticism will have a significantly negative relationship with Self-Efficacy of young leaders.

Research have found that an individuals personality and values influence a more specific leadership self-efficacy (LSE) construct (Chan and Drasgow 2001), which may be defined as individuals perceived self-capability to perform both cognitive and behavioral functions required to effectively perform a specific leadership task (Kane, Zaccaro, Tremble and Macude 2002). LSE is considered to be similar to the task specific self-efficacy, but the environment, processes and a teams composition for a specific task are likely to influence this type of self-efficacy (Hendricks and Payne 2007). Further, Chan and Drasgow (2001) found LSE to be empirically related to two of the motivational constructs of MTL; Affective-Identity MTL and Social-Normative MTL. These findings may indicate that individuals that have a desire to lead and therefore may also feel an obligation to emerge into leadership positions would have confidence in their ability to lead. Though LSE is considered to be similar to task specific self-efficacy, and is somewhat different in scope from the general self-efficacy construct, the 4 basic components of self-efficacy; mastery experiences, positive vicarious experiences, verbal persuasion and emotional arousal still apply.

A general problem in regards to leader emergence is that many emerging leaders are young individuals with a limited amount of experiences both when it comes to life itself and the leader role, due to their young age. Benjamin and O'Reilly (2011) found in their study of early career challenges for MBA graduates that young professionals tend to lack experience, and especially leader experience. It is therefore likely to assume that individuals that just recently have started their leader careers have had a limited amount of time to develop their LSE as leaders. As this study focuses on young leader careers, it is considered to be more beneficial to consider the more general approach to self-efficacy that embrace a broader experience platform, and is shown to be an important predictor of general performance (Stajkovic and Luthans 1998).

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Based on theory of how Affective-Identity MTL, Social-Normative MTL and Self-Efficacy are found to be related to leadership, we propose the following:

*Hypothesis 5:* Leaders score higher on Affective-Identity MTL (time 1 and 2), Social- Normative MTL (time 1 and 2) and Self-Efficacy than non-leaders.

## **Methodology**

### ***The Study of Leader Emergence***

The data collection of the current study started in 2006. The participants were at that time students at a Norwegian business school, and were offered to be a part of the study. By agreeing to participate, they had to answer a questionnaire containing the measures of NEO PI FFI, MTL, demographics, choice of study as well as giving the researchers permission to attain their grades. This was a longitudinal study, therefore the participants was asked to be contacted at a later point in time in order to answer new surveys. At time 1 the data was collected over a period of four years, from 2006 to 2010. Time 2 data was gathered in the spring of 2012. The study has the objective to give a further and broader understanding of what that influences young individuals to emerge into leadership positions. It is an ongoing longitudinal study initiated by the professors' Øyvind Martinsen and Jan Ketil Arnulf at BI Norwegian Business School.

Longitudinal data can be defined as "data resulting from the observation of subjects, on a number of variables overtime" (Van der Kamp and Bijleveld 1998, 1). The research method includes measures being repeated over time, and at a certain number of occasions.

### ***Participants***

#### ***Time 1:***

The first data collection was gathered over a 4-year period from 2006 to 2010 resulting in a total of 5328 respondents, 2958 females and 2353 males. The response rate was between 31-34 percent and a mean age of 24.26. The participants were at the time all Bachelor students from a Norwegian Business school.

*Time 2:*

In time two the sample of participants from 2006 and 2007 was contacted, as this group of individuals are most likely to have finished their education, and started their careers as full time workers. From a total of 2000 participants, we were able to locate the email addresses to 1830 persons, 500 from the year 2006 and 1550 from 2007. A total number of 640 respondents participated in the survey, making the response rate 35 percent which is similar to the average response rate in the first phase of the study. Of the 640 participants, 623 of them were compatible with the personality profiles that were measured at time one. The participants in phase two of the study consisted of 376 (58.8%) females and 264 (41.3%) males. The mean age of the respondents was 25.86. The participants were all previous bachelor students from a Norwegian Business School, where 554 (86.6%) of the individuals at this point in time were working full time, and 86 (13.4%) was working part time. Individuals that answered that they had a leader position was 181 (28.3%), where as 459 (71.7%) of the respondents did not have leader responsibilities.

Personality profiles of the participants had already been provided from the first data collection, and as personality is shown to be relatively stable in adulthood (Allport 1961), the personality measures were not repeated. MTL is measured for the second time, and the measure of self-efficacy is added.

***Procedure****Time 1:*

At time 1, an e-mail with an offer to participate in the survey was sent out to all Bachelor students at a Norwegian Business School. In addition to being asked by the classroom teachers to participate, two reminders were sent out by e-mail. The participants answered a web-based survey through a link in the e-mail. The participation was anonymous, which was made clear from the survey introduction text.



*Time 2:*

To test the hypotheses in this study and gather data at time two, a new web-based survey was distributed by e-mails during the spring of 2012. The survey was sent to individuals who at the first stage of the study of leader careers had agreed upon further participation. Two reminders were later sent in order to increase the number of participants. The participation was anonymous as with time 1, which was clearly communicated by the information in the emails. To increase the participation in the study individuals attaining a leader position were offered the possibility to get a free 360-leader evaluation and an invitation to a half-day seminar to discuss the results from the 360-evaluation if completing the questionnaire. This will be completed by Øyvind Martinsen and Jan Ketil Arnulf at a later time.

***Measures****Demographic variables*

Control variables such as gender and age was included in the study, due to its possible influential effect on the results.

*Big Five personality measure (only measured at time 1)*

A 60-item Norwegian version of the NEO five-factor inventory has been applied in order to measure the Big Five personality factors of the participants (NEO-FFI; McCrae and Costa 2004). The NEO-FFI has shown evidence of high validity (Costa and McCrae 1992). Martinsen, Nordvik and Østbø (2011) found the Norwegian measure to be consistent in its results, supporting the factorial stability of the five-factor model. A 5 point Likert-type response scale ranging from 1 = *strongly disagree* and 5 = *strongly agree* was used.

*MTL (measured at time 1 and 2)*

An abridged, and Norwegian translated version of Chan and Drasgow's (2001) MTL scale was used to test MTL in this longitudinal study. The scale is a 15-item measure, with 5 items per dimension. The response scale used was a 7 point

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Likert-type, ranging from 1 = *totally in disagreement* and 7 = *absolutely in agreement*. MTL was measured at both time 1 and time 2 as it is a dynamic construct, and it is interesting to investigate possible changes between time 1 and time 2.

#### *Self-Efficacy (only measured at time 2)*

The New General Self-Efficacy Scale developed by Chen, Gully and Eden (2001) was translated into Norwegian and used to measure the participants' general Self-Efficacy. The measure contains of 8 items, with a 5 point Likert-type response scale, ranging from 1= *strongly disagree* to 5= *strongly agree*.

#### **Data Analysis**

The data was analyzed in several steps and the statistical program SPSS 17.0 was used in the analyses of the data. As the measures used to assess Personality, MTL and Self-Efficacy are well-tested and established measurements, factor analysis was not performed in our analysis. In order to test the hypotheses and examine how well the independent variables were able to predict Leader Emergence, multiple regression was used. Multiple regression analysis is an analysis used to assess the relationship between one dependent variable and the influence of several independent variables (Tabachnick and Fidell 2007).

Reversed questions were recoded, to align all answer values and prevent misreading of the data set. Then each hypothesis were tested and analyzed. When examining whether MTL (time 1 and 2) mediated the relationship between Personality and Leader Emergence, a mediation analysis were performed. The mediation analysis tested whether MTL (time 1 and 2) would represent some of the underlying mechanisms in the relationship between Personality and Leader Emergence. When testing hypotheses 4a-b the function "split file" was performed in order to analyze the relationship between Personality and Self-Efficacy for young leaders. In the analysis of hypothesis 5 an independent-samples t-test was performed, in order to compare the mean scores on the two MTL variables (time 1 and 2) and Self-Efficacy for the two different groups, leaders and non-leaders. Further, a hierarchical multiple regression analysis was conducted to examine what effect the independent variables have on Leader Emergence.

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## Results

### *Descriptive statistics*

In table 1 the descriptive statistics is presented, including reliability estimates, means, standard deviations, and intercorrelations among the variables included in the analysis. Most of the correlations are significant at the .01 level while 11 of the correlations are significant at the .05 level.

As expected, the correlations between Leader Emergence and the Personality factors Neuroticism, Extraversion and Openness to Experience are significant, although the sizes were moderate ranging from .098 - .177, with Neuroticism at the .01 level and Extraversion and Openness to Experience at the .05 level. That Conscientiousness do not correlate with Leader Emergence was not expected, while no relationship between Leader Emergence and Agreeableness was predicted. All five or the personality factors correlate with Affective-Identity MTL (time 1) and Non-Calculative MTL (time 1), with both negative and positive absolute sizes from .085 - .409. All of the personality factors, except from Openness to Experience, correlate with Social-Normative MTL (time 1), with both negative and positive sizes ranging from .085 - .241. All five personality factors also correlate with Affective-Identity MTL (time 2) and Non-Calculative MTL (time 2), with both negative and positive absolute sizes, ranging from 0.88 - .315. Some of the correlation values are therefore moderate, while other are fairly strong (e.g. between Extraversion and Affective-Identity MTL, with a correlation of .315). There were only two personality factors that correlated moderately with Social-Normative MTL (time 2), namely Extraversion (.225) and Conscientiousness (.109).

Self-Efficacy correlated significantly with all but Agreeableness of the personality factors, with absolute sizes ranging from .141 - .265, and all of the MTL components (both time 1 and 2), except from Non-Calculative MTL (time 1), with absolute sizes ranging from .112 - .392. The strongest correlation with personality is with Conscientiousness (.265) and with MTL the strongest correlation is with Affective-Identity MTL (time 2) (.392.) The correlation between Self-Efficacy and Leader Emergence are significant and positive (.096), but somewhat weaker than the other Self-Efficacy correlations.

Leader Emergence correlates significantly and substantially with Affective-Identity MTL at both time 1 and 2 (time 1 = .114, time 2 = .259), but not with the two other MTL components (both time 1 and 2).

The control variable Age correlates with all of the five personality traits, with both positive and negative sizes ranging from .107 – .165, indicating moderate effects of Age on Personality. There is no relationship between Age and Self-Efficacy, while there exists correlations between the MTL components Affective-Identity (time 1) and Social-Normative (both time 1 and 2), with absolute moderate negative sizes, ranging from .130 - .191. There are no correlations between Age and the remaining MTL components Non-Calculative (both time 1 and 2) and Affective-Identity (time 1). Lastly does Age correlate moderately with Leader Emergence, with .191. Gender correlates negatively with all of the five personality traits, except from Extraversion, with absolute sizes ranging from .112 - .315. Gender does not correlate with Self-Efficacy or Leader Emergence, but with the MTL components Affective-Identity (both time 1 and 2), Non-Calculative MTL (both time 1 and 2) and Social-Normative MTL (only time 1), with absolute, but moderate positively sizes ranging from .080 - .109.

**Table 1.** Descriptive Statistics.

	Mean	SD	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.
1. Age	25.86	7.40														
2. Gender	1.41	.49	-.018													
3. Neuroticism	48.92	7.80	-.148**	-.239**	(.78)											
4. Extraversion	54.64	8.84	-.165**	-.072	-.250**	(.77)										
5. Agreeableness	49.47	11.1	.107**	-.315**	-.006	.091*	(.73)									
6. Openness to Experience	48.19	9.44	.147**	-.124**	.047	.149**	.97*	(.76)								
7. Conscientiousness	54.20	9.63	.126**	-.112**	-.322**	.279**	.115**	0.46	(.83)							
8. Self-Efficacy	4.23	.46	-.076	-.069	-.141**	.222**	-.062	.169**	.265**	(.88)						
9. Affective Identity MTL, time 1	5.18	1.13	-.130**	.080*	-.189**	.409**	-.230**	.207**	.272**	.286**	(.45)					
10. Non-Calculative MTL, time 1	3.04	.97	-.068	.104**	.123**	-.197**	-.224**	-.154**	-.220**	-.034	-.116**	(.67)				
11. Social-Normative MTL, time 1	4.53	.99	-.191**	.049	-.085*	.241**	-.151**	.061	.172**	.178**	.465**	-.072	(.62)			
12. Affective-Identity MTL, time 2	1.85	1.09	-.057	.101*	-.183**	.315**	-.188**	.169**	.179**	.392**	.529**	-.076	.268**	(.45)		
13. Non-Calculative MTL, time 2	0.04	.96	-.35	.109**	.111**	-.180**	-.156**	-.088*	-.167**	-.112**	-.081*	.325**	-.088*	-.196**	(.67)	
14. Social-Normative MTL, time 2	4.36	.98	-.170**	.082*	-.063	.225**	-.069	.057	.109**	.219**	.302**	-.040	.469**	.370**	-.197**	(.62)
15. Leader Emergence	1.28	.45	.191**	.038	-.177**	.103*	-.012	.098*	.060	.096*	.114**	-.065	-.042	.259**	-.049	.053

MTL=Motivation to lead. M= Mean. SD= Standard Deviation.

\*\* =  $p < .01$ , \* =  $p < .05$ .

Reliability ( $\alpha$ ) estimates are listed on the diagonal

***Hypotheses testing****Hypotheses 1 - 1e.*

The first multiple regression analysis was performed on hypotheses 1 – 1e, which expected that personality will be a predictor of leader emergence in early careers. The analysis was performed in two steps, in order to include, and see the effect of the control variables age and gender. From step one, the effect of age and gender explains 3.8 percent of the variance in Leader Emergence. The control variables accounts for such a small percent because only age is statistically significant, with a  $\beta$  of .191 ( $p < .001$ ). When adding personality into the analysis the variables explain 7.5 percent of the variance in leader emergence, with a change in  $R^2$  of .038. Age ( $p < .001$ ), Neuroticism ( $p < .01$ ) and Extraversion ( $p < .05$ ) make a statistically significant unique contribution to leader emergence in early careers. Age is the variable that makes the strongest contribution to Leader Emergence ( $\beta$  .286), followed by Neuroticism ( $\beta$  -.136) and Extraversion ( $\beta$  .103). The results indicate that the older an individual is, the more likely it is to emerge into a leadership position. Further, scoring low on Neuroticism and high on Extraversion will increase the possibility of leader emergence, compared to individuals who score high on Neuroticism and low on Extraversion. According to the results gender and high or low scores on Openness to experience, Agreeableness and Conscientiousness do not influence whether or not an individual becomes a leader early in his/hers career. Based on the results, hypotheses 1a, 1d and 1e are supported, while hypotheses 1b and 1c were not supported. Therefore hypothesis 1 is partially supported. Table 2 shows the R-values, F values, beta values and significance level, while table 3 shows the degrees of freedom for hypotheses 1 – 1e.

**Table 2.** Model summary and coefficients, hypotheses 1 – 1e.

Predictors	Leader Emergence	
	Step 1	Step 2
<u>Control variables</u>		
Age	.191***	.286***
Gender	.041	.007
<u>Personality</u>		
Neuroticism		-.136**
Extraversion		.103*
Agreeableness		-.043
Openness to experience		.086
Conscientiousness		-.034
R <sup>2</sup>	.038	.075
R <sup>2</sup> change	.038	.038
F	12.2***	7.17***
F change	12.2***	5.02***

N= 623. \*\*\* =  $p < .001$ , \*\* =  $p < .01$ , \* =  $p < .05$

Dependent variable: Leader Emergence.

**Table 3.** Degrees of freedom, hypotheses 1 – 1e.

	Sum of Squares	Df	Mean square
<u>Step 1</u>			
Regression	4.77	2	2.38
Residual	121.5	620	.196
Total	126.3	622	
<u>Step 2</u>			
Regression	9.52	7	1.36
Residual	116.8	615	.190
Total	126.3	622	

Predictors, step 1: Age, Gender

Predictors, step 2: Neuroticism, Extraversion, Agreeableness, Openness to experience, Conscientiousness

Dependent variable: Leader Emergence.

### *Hypotheses 2 – 2c.*

The multiple regression analysis of hypothesis 2a show that the control variables account for 1.3 percent of the variance in Affective-Identity MTL (time 2), where only gender show statistical significance ( $\beta$  .100,  $p < .05$ ). The affect of the control variables is therefore quite low. When adding the personality variables, they account for 19.3 percent of the variance in Affective-Identity MTL (time 2). The coefficients table shows that the traits Extraversion, Agreeableness and

Openness to Experience are making a statistically significant unique contribution in Affective-Identity MTL (time 2) at the 0.001 level, while the trait Conscientiousness make a statistically significant unique contribution in the MTL component at the 0.01 level, and Neuroticism is statistically significant at the 0.05 level. The traits that make the strongest unique contribution to the Affective-Identity MTL (time 2) are Extraversion ( $\beta$  .256) and Agreeableness ( $\beta$  -.216), followed by Openness to experience ( $\beta$  .164), Conscientiousness ( $\beta$  .110) and Neuroticism ( $\beta$  -.083). This suggests that individuals scoring high on Extraversion, Openness to Experience and Conscientiousness and low on Agreeableness and Neuroticism have a high Affective-Identity MTL (time 2). The control variables do not show an affect on Affective-Identity MTL (time 2). Based on this, hypothesis 2a is supported. Table 4 shows the R-values, F values, beta values and significance level, while table 5 shows the degrees of freedom for hypothesis 2a.

**Table 4.** Model summary and coefficients, hypothesis 2a.

Predictors	Affective-Identity MTL(time 2)	
	Step 1	Step 2
<u>Control variables</u>		
Age	-.055	-.041
Gender	.100*	.063
<u>Personality</u>		
Neuroticism		-.083*
Extraversion		.256***
Agreeableness		-.216***
Openness to Experience		.164***
Conscientiousness		.110**
R <sup>2</sup>	.013	.193
R <sup>2</sup> change	.013	.180
F	4.14**	20.99***
F change	4.14**	27.381***

N= 623. \*\*\* =  $p < .001$ , \*\* =  $p < .01$ , \* =  $p < .05$

Dependent variable: Affective-Identity MTL (time 2).



**Table 5.** Degrees of freedom, hypothesis 2a.

	Sum of Squares	Df	Mean square
<u>Step 1</u>			
Regression	9.67	2	4.84
Residual	724	620	1.17
Total	733.7	622	
<u>Step 2</u>			
Regression	141.5	7	20.21
Residual	592.2	615	.963
Total	733.7	622	

Predictors, step 1: Age, Gender

Predictors, step 2: Neuroticism, Extraversion, Agreeableness, Openness to experience, Conscientiousness

Dependent variable: Affective-Identity MTL (time 2)

When analyzing hypothesis 2b and the effect Personality have on the Social-Normative MTL (time 2), the results showed that the control variables show a statistical significance, and account for 3.5 percent of the total variance in Social-Normative MTL (time 2). When adding the personality variables, the independent variables accounts for 9.2 percent of the variance in the Social-Normative MTL (time 2). Both age ( $\beta$  -.154,  $p < .001$ ) and gender ( $\beta$  .096,  $p < .05$ ) make a unique contribution to the MTL component. Of the personality variables, Extraversion shows the strongest effect on the MTL component ( $\beta$  .177,  $p < .001$ ), followed by Conscientiousness ( $\beta$  .096,  $p < .05$ ). This means that individuals that are of a young age, and score high on the personality traits Extraversion and Conscientiousness are likely to score high on the Social-Normative MTL (time 2). The remaining traits Neuroticism, Openness to Experience and Agreeableness do not have any impact on whether an individual scores high or low on the Social-Normative MTL (time 2). Hypothesis 2b is therefore partially supported. Table 6 shows the R-values, F values, beta values and significance level, while table 7 shows the degrees of freedom for hypothesis 2b.

**Table 6.** Model summary and coefficients, hypothesis 2b

Predictors	Social-Normative MTL (time 2)	
	Step 1	Step 2
<u>Control variables</u>		
Age	-.169***	-.154***
Gender	.079*	.096*
<u>Personality</u>		
Neuroticism		.009
Extraversion		.177***
Agreeableness		-.057
Openness to Experience		.066
Conscientiousness		.096*
R <sup>2</sup>	.035	.092
R <sup>2</sup> change	.035	.056
F	11.33***	8.85***
F change	11.33***	7.617***

N= 623. \*\*\* =  $p < .001$ , \*\* =  $p < .01$ , \* =  $p < .05$

Dependent variable: Social-Normative MTL (time 2).

**Table 7.** Degrees of freedom, hypothesis 2b.

	Sum of Squares	Df	Mean square
<u>Step 1</u>			
Regression	21.2	2	10.6
Residual	579.8	620	.935
Total	601.1	622	
<u>Step 2</u>			
Regression	55.0	7	7.85
Residual	546.1	615	.888
Total	601.1	622	

Predictors, step 1: Age, Gender

Predictors, step 2: Neuroticism, Extraversion, Agreeableness, Openness to experience, Conscientiousness

Dependent variable: Social-Normative MTL (time 2)

When testing hypothesis 2c, the independent variables results accounts for 7.2 percent of the variance in the Non-Calculative MTL (time 2). The three traits Extraversion, Agreeableness and Conscientiousness are statistically significant, but at different levels. Extraversion and Agreeableness makes a statistically unique contribution to Non-Calculative MTL (time 2) at the 0.01 level, and Conscientiousness at the 0.05 level. Extraversion is therefore the strongest unique contributor to the Non-Calculative MTL (time 2) ( $\beta$  -.119), while Agreeableness

( $\beta$  -.108) and Conscientiousness ( $\beta$  -.088) also contributes to the Non-Calculative MTL (time 2), but with lower beta values. The results indicate that individuals that score low on all three traits tend to score high on the Non-Calculative MTL (time 2). Since the traits Neuroticism and Openness to Experience are not statistically significant these traits do not have any impact on whether or not the individuals scores high or low on the Non-Calculative MTL (time 2), making hypothesis 2c only partially supported. Table 8 shows the R-values, F values, beta values and significance level, while table 9 shows the degrees of freedom for hypothesis 2c.

**Table 8.** Model summary and coefficients, hypothesis 2c.

Predictors	Non-Calculative MTL (time 2)	
	Step 1	Step 2
<u>Control variables</u>		
Age	-.033	-.014
Gender	.109**	.067
<u>Personality</u>		
Neuroticism		.068
Extraversion		-.119**
Agreeableness		-.108**
Openness to Experience		-.049
Conscientiousness		-.088*
R <sup>2</sup>	.013	.072
R <sup>2</sup> change	.013	.059
F	4.09**	6.86***
F change	4.09**	7.88***

N= 623. \*\*\* =  $p < .001$ , \*\* =  $p < .01$ , \* =  $p < .05$

Dependent variable: Non-Calculative MTL (time 2).

**Table 9.** Degrees of freedom, hypothesis 2c.

	Sum of Squares	Df	Mean square
<u>Step 1</u>			
Regression	7.47	2	3.73
Residual	566.1	620	.913
Total	573.6	622	
<u>Step 2</u>			
Regression	41.5	7	5.93
Residual	532.1	615	.865
Total	573.6	622	

Predictors, step 1: Age, Gender

Predictors, step 2: Neuroticism, Extraversion, Agreeableness, Openness to experience, Conscientiousness

Based on the multiple regression analyses of hypotheses 2a-c, hypothesis 2 is partially supported since not all of the personality traits are significantly related to all of the MTL components (time 2).

### *Hypothesis 3.*

The results from the multiple regression analysis when testing hypothesis 3 show that the control variables account for 3.8 percent of the variation in Leader Emergence. However, it is only Age that shows statistical significance in the analysis ( $\beta .191$ ,  $p < .001$ ). Hypothesis 3 suggests that Affective-Identity MTL (time 1 and 2) and Social-Normative MTL (time 1 and 2) will mediate the relationship between Personality and Leader Emergence. What is demonstrated in the analysis is that Neuroticism ( $p < .01$ ) and Extraversion ( $p < .05$ ) is the traits that make a statistically significant unique contribution to Leader Emergence. Neuroticism is the trait that makes the strongest unique contribution to leader emergence ( $\beta -.136$ ), followed by Extroversion ( $\beta .103$ ). When adding MTL (time 1 and 2) as mediation variables to the relationship between Personality and Leader Emergence, the results show that Age ( $p < .001$ ), Affective-Identity MTL (time 2) ( $p < .001$ ) and Neuroticism ( $p < .01$ ) are the only variables that make a statistically significant contribution to Leader Emergence. When adding MTL as mediation variables, Affective-Identity MTL (time 2) ( $\beta .268$ ) is the variable that makes the strongest unique contribution to Leader Emergence ( $\beta .268$ ), followed by Age ( $\beta .193$ ), and Neuroticism ( $\beta -.117$ ). Extraversion is not statistically significant when adding MTL as a mediator, suggesting that Affective-Identity MTL (time 2) mediates the effect of Extraversion on Leader Emergence. The results means that individuals scoring low on Neuroticism and high on Extraversion are more likely to emerge as leaders early in their careers, compared to individuals who score high on Neuroticism and low on Extraversion. The effect of Extraversion is explained through Affective-Identity MTL (time 2), suggesting that individuals who shore high on the trait Extraversion will score high on Affective-Identity MTL (time 2). As the results show, individuals who score high on Affective-Identity MTL (time 2) are more likely to emerge as leaders than individuals who score low on this MTL component, and therefore Affective-

Identity MTL (time 2) mediates the relationship between Personality and Leader Emergence. According to the results, high or low scores on Openness to Experience, Agreeableness and Conscientiousness do not influence whether or not an individual becomes a leader early in his/her career. Based on these results, hypothesis 3 is only partially supported since only Affective-Identity MTL (time 2) mediates the relationship between Personality and Leader Emergence. Table 10 shows the R-values, F values, beta values and significance level, while table 11 shows the degrees of freedom for hypotheses 3.

**Table 10.** Model summary and coefficients, hypothesis 3.

Predictors	Leader Emergence			
	Step 1	Step 2	Step 3	Step 4
<u>Control variables</u>				
Age	.191***	.186***	.196***	.193***
Gender	.041	.007	.004	-.010
<u>Personality</u>				
Neuroticism		-.136**	-.131**	-.117**
Extraversion		.103*	.077	.049
Agreeableness		-.043	-.022	.006
Openness to Experience		.068	.052	.032
Conscientiousness		-.034	-.052	-.057
<u>Motivation to Lead time 1</u>				
Affective-Identity MTL			.070	-.040
Non-Calculative MTL			-.009	-.013
Social-Normative MTL			.015	.018
<u>Motivation to Lead time 2</u>				
Affective-Identity MTL				.268***
Non-Calculative MTL				.024
Social-Normative MTL				-.017
R <sup>2</sup>	.038	.075	.080	.126
R <sup>2</sup> change	.038	.038	.004	.046
F	12.16***	7.17***	5.30***	6.752***
F change	12.16***	5.02***	.944	10.75***

N= 623. \*\*\* =  $p < .001$ , \*\* =  $p < .01$ , \* =  $p < .05$

Dependent variable: Leader Emergence.

**Table 11.** Degrees of freedom, hypothesis 3.

	Sum of Squares	Df	Mean square
<u>Step 1</u>			
Regression	4.76	2	2.38
Residual	121.5	620	.196
Total	126.3	622	
<u>Step 2</u>			
Regression	9.53	7	1.36
Residual	116.7	615	.190
Total	126.3		
<u>Step 3</u>			
Regression	10.1	10	1.01
Residual	116.2	612	.190
Total	126.3		
<u>Step 4</u>			
Regression	15.9	13	1.23
Residual	110.4	609	.181
Total	126.3	622	

Predictors, step 1: Age, Gender

Predictors, step 2: Neuroticism, Extraversion, Agreeableness, Openness to experience, Conscientiousness

Predictors, step 3: Affective-Identity MTL(time 1), Non-Calculative MTL (time 1), Social-Normative MTL (time 1)

Predictors, step 4: Affective-Identity MTL (time 2), Non-Calculative MTL (Time 2), Social-Normative MTL (time 2).

Dependent variable: Leader Emergence.

#### *Hypotheses 4 – 4b.*

When testing if there is a significant relationship between Conscientiousness, Extraversion and Neuroticism and the Self-Efficacy of young individuals in leadership positions, the results show that 14.4 percent in the variance of Self-Efficacy in leaders may be explained by Personality. The only trait that makes a statistically significant unique contribution to the Self-Efficacy of young leaders is Conscientiousness ( $p < .05$ ). It is therefore also the strongest unique contributor to Self-Efficacy ( $\beta .234$ ). The results mean that young leaders are likely to have a strong Self-Efficacy if they score high on the trait Conscientiousness. According to the results high or low scores on the four remaining traits, Neuroticism, Extraversion, Agreeableness and Openness to Experience, do not influence

whether young individuals in leader positions have a high or low Self-Efficacy. The control variables Age and Gender do not contribute much to the all over results in the analysis. Extraversion and Neuroticism do not seem to impact the Self-Efficacy of young leaders, resulting in hypothesis 4a only being partially supported, and a rejection of hypothesis 4b. Table 12 shows the R-values, F values, beta values and significance level, while table 13 shows the degrees of freedom for hypotheses 4 – 4b.

**Table 12.** Model summary and coefficients, hypotheses 4-4b.

Predictors	Self-Efficacy	
	Step 1	Step 2
<u>Control variables</u>		
Age	-.089	-.133
Gender	.159*	.135
<u>Personality</u>		
Neuroticism		-.099
Extraversion		.093
Agreeableness		-.091
Openness to Experience		.123
Conscientiousness		.234**
R <sup>2</sup>	.033	.144
R <sup>2</sup> change	.033	.112
F	2.95**	4.05***
F change	2.95**	4.35***

N= 176. \*\*\* = p < .001, \*\* = p < .01, \* = p < .05  
Dependent variable: Self-Efficacy.

**Table 13.** Degrees of freedom, hypotheses 4-4b.

	Sum of Squares	Df	Mean square
<u>Step 1</u>			
Regression	1.01	2	.504
Residual	29.6	173	.171
Total	30.6	175	
<u>Step 2</u>			
Regression	4.42	7	.631
Residual	26.2	168	.156
Total	30.6	175	

Predictors, step 1: Age, Gender

Predictors, step 2: Neuroticism, Extraversion, Agreeableness, Openness to experience, Conscientiousness

Dependent variable: Self-Efficacy

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*Hypothesis 5.*

An independent-samples t-test was conducted to compare the Affective-Identity MTL (time 1 and 2), Social-Normative MTL (time 1 and 2) and Self-Efficacy scores for leaders and non-leaders. The result of the t-test showed that there was a significant difference in the scores of leaders and non-leaders in the independent variables Affective-Identity MTL (time 1), Affective-Identity MTL (time 2), and Self-Efficacy. The Social-Normative MTL (time 1 and 2) did not show a significant difference between the scores of leaders and non-leaders.

In order to examine the effect that the independent variables have on Leader Emergence, a hierarchical multiple regression analysis was conducted. The results showed that Age make a statistically significant unique contribution through all four steps of the multiple regression ( $p < .001$ ). Further, in step two, Affective-Identity MTL (time 1) is the only MTL component that makes a statistically significant unique contribution to Leader Emergence ( $\beta .130, p < .01$ ). When adding the two MTL components Affective-Identity (time 2) and Social-Normative (time 2), the effect of Affective-Identity (time 1) are no longer statistically significant. However, Affective-Identity MTL (time 2) shows a strong statistically significant contribution to Leader Emergence ( $\beta .278, p < .001$ ). This indicates that the Affective-Identity MTL (time 2) mediates the effect of Affective-Identity MTL (time 1) on Leader Emergence, suggesting that the individuals scoring high on Affective-Identity MTL at time 1, also scored high on the same MTL component at time 2. Lastly, when adding the Self-Efficacy variable the results are more or less unaffected, as Self-Efficacy are not significant, resulting in only Affective-Identity MTL (time 2) ( $\beta .275, p < .001$ ) and Age ( $\beta .206, p < .001$ ) being statistically significant on Leader Emergence.

Based on the independent-samples t-test and the hierarchal multiple regression hypothesis 5 is only partially supported. The Social-Normative MTL (time 1 and 2) was not found to predict Leader Emergence nor revealed a significant difference in the mean score between leaders and non-leaders. Self-Efficacy was also not found to be a significant predictor of Leader Emergence, but the t-test revealed that there were a significant difference in the mean score of Self-Efficacy between leaders and non-leaders. Table 14 shows the group statistics and significance level from the t-test, while table 15 shows the R-values, F values,



beta values and significance level. Lastly, table 16 shows the degrees of freedom for hypothesis 5.

**Table 14.** Group statistics and significance level, hypothesis 5.

Variable	Leader 1=no 2=yes	Mean	Sig. (2-tailed)
Self-efficacy	1 2	4.2 4.3	.015
Affective-Identity MTL, time 1	1 2	5.1 5.4	.004
Social-Normative MTL, time 1	1 2	4.5 4.6	.291
Affective-Identity MTL, time 2	1 2	1.7 2.3	.000
Social-Normative MTL, time 2	1 2	4.3 4.4	.181

N leader = 181, N not leader = 459.

**Table 15.** Model summary and coefficients, hypothesis 5.

Predictors	Leader Emergence			
	Step 1	Step 2	Step 3	Step 4
<u>Control variables</u>				
Age	.191***	.209***	.204***	.204***
Gender	.041	.034	.017	.017
<u>Motivation to Lead, time 1</u>				
Affective-Identity MTL		.125**	-.016	-.016
Social-Normative MTL		.019	.020	.020
<u>Motivation to Lead, time 2</u>				
Affective-Identity MTL			.280***	.278***
Social-Normative MTL			-.020	-.020
Self-Efficacy				.008
R <sup>2</sup>			.280***	.278***
R <sup>2</sup> square	.038	.059	.112	.112
F	.038	.021	.053	.000
F change	12.6***	7.9***	9.92***	8.81***
	12.6***	4.6**	12.6***	.038

N= 640. \*\*\* =  $p < .001$ , \*\* =  $p < .01$ , \* =  $p < .05$

Dependent variable: Leader Emergence.

**Table 16.** Degrees of freedom, hypothesis 5.

	<b>Sum of Squares</b>	<b>Df</b>	<b>Mean square</b>
<u>Step 1</u>			
Regression	4.9	2	2.47
Residual	124.8	637	.196
Total	129.8	639	
<u>Step 2</u>			
Regression	7.6	5	1.52
Residual	122.2	634	.193
Total	129.8		
<u>Step 3</u>			
Regression	14.5	8	1.81
Residual	115.3	631	.183
Total	129.8		
<u>Step 4</u>			
Regression	14.5	9	1.61
Residual	115.3	630	.183
Total	129.8	639	

Predictors, step 1: Age, Gender

Predictors, step 2: Affective-Identity MTL (time 1), Social-Normative MTL (time 1)

Predictors, step 3: Affective-Identity MTL(time 2), Social-Normative MTL (time 2)

Predictors, step 4: Self-Efficacy

Dependent variable: Leader Emergence

## Discussion

The main purpose of this study was to investigate and gain further knowledge of how and to what degree young individuals are influenced by the factors Personality, MTL and Self-Efficacy when emerging into leadership positions.

First, in respect to hypotheses 1-1e, it was found that Personality partially predicts Leader Emergence in early careers. In comparing the results with previous research (Judge et al. 2002), the findings are somewhat surprising. It is possible that the emergence of young individuals into leadership positions may be prohibited and dominated by other factors such as their lack of experience and different cultural aspects. Openness to Experience was in this study expected to have a positive relationship with Leader Emergence, but according to the current findings the trait was not significantly related to Leader Emergence. Similarly, Conscientiousness was found to be unrelated to Leader Emergence. The predictions about the traits Neuroticism, Extraversion and Agreeableness were on the other hand supported. Though it might seem a bit surprising that Openness to

Experience and Conscientiousness was not found to be consistent with established research (Judge et al. 2002), it may be explained by several factors. First, It is likely that young individuals scoring high on Openness to Experience not necessarily feel competent enough after recent completion of their education, and therefore avoid early leadership responsibilities despite their novelty seeking and creative characteristics. It is also possible that these young individuals may feel prohibited by situational factors such as job positions with limited independence, which can be restricting towards individuals' attributes such as creativity and being imaginative. Previous findings also suggest that individuals that score high on Conscientiousness emerge into leadership due to their preferences to be hard working, orderly and self-disciplined (Judge et al. 2002). These characteristics tend to be beneficial in terms of the possibility to attain leader responsibilities and a leadership position. It is also likely that previously length of service in an organization is required in order to be able to attain a leadership position. A possible explanation to the discrepancy in the findings of this study, compared to others (Judge et al. 2002), may be because the facets of Conscientiousness can be difficult to discover at first eyesight. Young individuals in a recruitment setting can therefore be vulnerable, and easily disregarded, as they might be perceived as less mature than individuals that are older and have more experience. This argument is also supported by the findings in this study, where the control variable Age is the strongest predictor of Leader Emergence, suggesting that the young age ( $M=25.86$ ) of the participants in this study have affected the current results.

Further, hypothesis 2 was partially supported, as Personality showed a statistical significant relationship with MTL (time 2). However, not all of the five traits demonstrated this relationship on all of the MTL (time 2) components. Interestingly this study found Extraversion to be the strongest predictors of all three MTL (time 2) components, contradicting other studies (Chan and Drasgow 2001; Norgård and Farstad 2011) where the trait Extraversion only have shown statistical significance to the Affective-Identity MTL component. The results of this study indicate that extravert individuals both have a desire to lead (Affective-Identity MTL), as well as experiencing a social responsibility (Social-Normative MTL) to accept leadership responsibilities. Further, the results show that individuals scoring low on Extraversion tend to calculate the costs and benefits

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(Non-Calculative MTL) of attaining leadership positions to a greater extent than individuals scoring high on this trait. The control variable Age was found to have an influence on Social-Normative MTL (time 2), indicating that older individuals tend to experience a larger degree of social responsibilities than younger individuals. This may be because age often is connected to tenure and life experience, which is likely to promote a larger degree of social responsibility.

In hypothesis 3, it was predicted that the MTL components Affective-Identity (time 1 and 2) and Social-Normative (time 1 and 2) would mediate the relationship between Personality and Leader Emergence. The finding that Social-Normative MTL (time 1 and 2) did not mediate the relationship between Personality and Leader Emergence was unexpected, since it was not in congruence with hypothesis 3 and inconsistent with previous research (Chan and Drasgow 2001). The findings in hypothesis 2b imply that individuals with a high score on Extraversion and Conscientiousness, scored high on the Social-Normative MTL (time 2). When adding the MTL components (time 1 and 2) as mediators between Personality and Leader Emergence in hypothesis 3, Social-Normative MTL (time 1 and 2) was not found to have a significant mediating relationship between the variables. Since Extraversion was found to be positively related to Leader Emergence (hypothesis 1a), and Social-Normative MTL (time 2), (hypothesis 2b) it is interesting that Social-Normative MTL (time 1 and 2) do not mediate the relationship between Personality and Leader Emergence. The time perspective on when these young individuals tend to emerge into these positions may explain why Social-Normative MTL (time 1 and 2) was not found to be a significant mediator. The result from hypothesis 1, 2a and 3 show that Age are a significant contributor in all hypotheses. This indicates that Age is an important variable in the relationship between Personality and Leader Emergence. It is therefore likely that even though these individuals feel a responsibility to lead (Social-Normative MTL), their young age and lack of experience may reduce the likelihood for them to emerge as leaders, which may explain why Social-Normative MTL (time 1 and 2) do not mediate the relationship between Personality and Leader Emergence.

Affective-Identity MTL (time 2) was on the other hand found to mediate the relationship between Personality and Leader Emergence. In the relationship

between Personality and Leader Emergence, Extraversion was found to be a direct predictor of Leader Emergence. However, when adding MTL(time 1 and 2) as a mediator, Extraversion no longer has a direct relationship to Leader Emergence. The mediation analysis shows that the effect of Extraversion is explained through Affective-Identity MTL (time 2). These results highlight the general underlying assumption that it is more to Leader Emergence than only personality traits, and that there are most likely several aspects influencing whom that are likely to emerge into leadership positions (Judge et al. 2002: Chan and Drasgow 2001). Nevertheless, the results indicate that in order to emerge as a leader, it is not sufficient enough to score high on Extraversion, individuals must also have a desire to lead (Affective-Identity MTL). On the other hand was Neuroticism found to be a significant negative direct predictor of Leader Emergence both directly and when adding MTL (time 1 and 2) as a mediator, suggesting that individuals who are emotional unstable tend to avoid leadership responsibilities. This is consistent with earlier findings in the personality and leadership literature (Judge et al. 2002).

When taking the results from hypothesis 3 into account, it becomes evident that that individuals who score high on MTL tend to emerge as leaders more than individuals who score low on MTL, suggesting that motivation is an important aspect of Leader Emergence. Nevertheless, since Social-Normative MTL (time 1 and 2) did not mediate the relationship between Personality and Leader Emergence, it is likely that the desire to lead (Affective-Identity MTL) is a stronger motivator than feeling social responsibility (Social-Normative MTL) to emerge as a leader. As mentioned, Age have shown to be an important factor in Leader Emergence, and may also explain why Social-Normative MTL (time 1 and 2) do not mediate the relationship. As an individual's desire to lead (Affective-Identity MTL) is a strong predictor of Leader Emergence, it is likely that young individuals can overcome the age barrier and emerge as leaders even though the results show that Age is a strong predictor of Leader Emergence.

In the analysis of hypothesis 3 the MTL measures from time 1 was also used. The results showed that the MTL components measured at time 1 did not show any statistical relationship with Leader Emergence. This may be explained by the fact that the measurements were taken early in their education and that their

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motivation to lead was low due to little life experience and general knowledge about work life. However, Chan and Drasgow (2001) argue that MTL can change and develop through life experiences, in which may explain why Affective-Identity MTL (time 1) is not significantly related to Leader Emergence, when Affective-Identity MTL (time 2) is.

In relation to hypotheses 4-4b, the results showed that only the personality trait Conscientiousness was statistically significantly related to Self-Efficacy of young leaders. This was an unexpected result, as previous research has found that also Extraversion and Neuroticism are significantly related to Self-Efficacy (Judge et al. 2007). The discrepancy between the previous and this study's results may be explained by different factors. First, previous research have measured the relationship between Personality and Self-Efficacy of individuals in various positions (Judge et al. 2007), while our focus have been on how Personality affect the Self-Efficacy of leaders. Secondly, the aim of this study was to investigate what variables that affect the emergence of young leaders, resulting in a sample of young individuals, in which differentiates this sample from previous research (Judge et al. 2007), with a larger age range. The discrepancy in the results can therefore be explained by differences in the sample, and the focus of the study. The fact that Conscientiousness was found to have a significant relationship with the Self-Efficacy of leaders is not surprising as they tend to be hard working, persistent and motivated to achieve, which are most likely contributing to a high task competence. It is therefore likely that such individuals may emerge into leadership positions more often than individuals without these characteristics, even though this is not evident in our results. Conscientiousness as a trait has also been significantly related to job performance (Judge et al. 2002; Judge et al. 2007), and individuals who work hard and therefore perform well are likely to experience a large range of mastery experiences, leading to Self-Efficacy. Judge and colleagues (2007) found that Conscientiousness is positively significantly related to both Self-Efficacy and job performance. It is therefore possible that young individuals who emerge into leadership positions possess this trait as they therefore have worked hard and performed in their job, which again might have influenced the emergence into such positions. As mentioned, conscientiousness may also be a trait that is hard to discover at first sight, which may be a possible

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explanation for why conscientiousness was not found to be a predictor of leader emergence in young leaders.

Interestingly the traits Extraversion and Neuroticism were not found to be significantly related to Self-Efficacy of young leaders, indicating that there could be other factors that influence Self-Efficacy. Though the individuals in the sample are young, and have less work life experience than older individuals, they do have other life experiences. It is possible that experiences such as voluntary work at school or in other arenas, childhood environment, socioeconomic status and the amount of previously perceived responsibility in life may influence individuals Self-Efficacy, and by that also the Self-Efficacy of young leaders. It is therefore possible that a high Self-Efficacy in a given situation may be transferred to other situations (Bandura 1997), indicating that previous experiences in different settings may both influence and predict the Self-Efficacy of young leaders in addition to the personality trait Conscientiousness.

The last hypothesis of the study tested whether leaders score higher on Affective-Identity MTL (time 1 and 2), Social-Normative MTL (time 1 and 2) and Self-Efficacy than non-leaders. The hypothesis was only partially supported. Affective-Identity MTL (time 2) is the strongest predictor of Leader Emergence, and it is evident from the results that Affective-Identity MTL (time 1) is mediated by the measure Affective-Identity MTL (time 2). The effect of Affective-Identity MTL (time 1) is therefore explained through Affective-Identity MTL (time 2), indicating that the Affective-Identity MTL (time 2) is the strongest predictor of Leader Emergence. Further, Social-Normative MTL (time 1 and 2) does not predict Leader Emergence. As mentioned, this might be due to the young age of the participants in the study, and the feeling of having to take a social responsibility may be less developed for young and inexperienced individuals compared to older individuals. This argument is supported by the analysis of hypothesis 5, where Age is a relatively strong predictor of Leader Emergence, suggesting that an increase in Age increases the likelihood of becoming a leader. Self-Efficacy was not found to be a significant predictor of Leader Emergence in the regression analysis. However, the t-test revealed that there is a significant difference between the Self-Efficacy scores for leaders and non-leaders. This result is especially interesting because even though the multiple regression

analysis do not reveal that Self-Efficacy have a significant effect on Leader Emergence, it is apparent that leaders score higher on Self-Efficacy than non-leaders. It is possible that since the participants in this study are young, and the fact that GSE is a situation-independent belief in oneself that alter through life and experiences (Judge, Erez and Bono 1998), the individuals level of Self-Efficacy may be at a moderate level. The small difference in the t-test score may be due to that individuals who are in leadership positions have also been individuals with a general high self-efficacy throughout life and therefore have had the courage to attain leader responsibilities despite their young age and inexperience. A reason for why the variable Self-Efficacy does not predict Leader Emergence may be because these individuals have not been in these positions long, and it may therefore take some time and positive experiences before their level of self-efficacy would be of significance. The individuals that have emerged into leadership positions are likely to attain specific leadership experience and additional life experience, as they grow older. A further development of their general self-efficacy and a more specific leadership self-efficacy is then likely to occur. It is therefore possible that by testing the same individuals later in life, the difference in the test scores of Self-Efficacy between leaders and non-leader, may be more evident, and possibly also be a significant predictor of Leader Emergence.

### **Limitations and Future Research**

There are several limitations to this study that must be addressed when evaluating the practical and theoretical contributions. The present study is of longitudinal design, in which is a favorable approach when one wants to identify changes in behavior and attitudes over time, enabling a better understanding of the causality in the observed changes. Longitudinal designs do therefore provide an increased insight compared to what many other research methods does. Nevertheless, the longitudinal design does have its limitations. The method are usually much more costly than other research designs such as cross sectional, that are only conducted once. When following individuals over a period of time, one is highly dependent on the participants' cooperation and keeping track on them, as they cannot be replaced (Biljeveld, van der Kamp, Mooijaart, van der Kloot, van der Leeden and van der Burg 1998). These weaknesses have to a certain degree been evident in this study, as many of the individuals have changed their contact information



since the first time of participation, making it harder to track them down and get in contact with them. When using longitudinal studies, the number of participants tend to decrease for each time, in which is also the case in our study. This may make the participation rate for follow up studies low and create problems.

Further, the data was based on self-report measures making it vulnerable to social desirability bias, as the respondents may answer according to how they would like to be perceived, rather than giving truthful answers. This may lead to more favorable responses on the measures (Kerlinger and Lee 2000). The MTL scale has in particular been found to have significant correlations with the Social Desirability Scale, and is therefore sensitive to produce answers that may be biased (Bobbio and Rattazzi 2006). In spite of this it is likely that the anonymity guarantees of the study (Podsakoff, MacKenzie, Lee and Podsakoff 2003) and the fact that the answers do not have any negative implications for the participants would reduce possible social desirability biases.

In relation to the measures used in this study, the Norwegian MTL scale utilized in this study is a translated measure, based on Chan and Drasgow's (2001) scale. Bobbio and Rattazzi (2006) found different patterns of correlations between the MTL subscales, which might indicate that there exist issues regarding the influence that socio-cultural variables have on the original MTL measure. The relationships found in this study were also somewhat inconsistent with previous research and it raises the question of whether the Norwegian MTL measure really measure the same constructs as Chan and Drasgow's (2001) original instrument. Nordgård and Farstad (2011) have studied the validity of the Norwegian MTL measure. They found that the measure could be shortened down to a 9-item measure, with three items on each MTL component. Some of the relationships within their model were not consistent with previous research (Chan and Drasgow 2001; Bobbio and Ratazzi 2006). It is likely that the modified Norwegian MTL measure developed by Nordgård and Farstad are not able to measure a second-order general MTL factor, that clarify the amount of variance within the three first-order components, which it according to Chan and Drasgow (2001) should have. Even though these possible problems are related to the 9-item MTL measure, these problems might also be present in the MTL measure used in this study (time 1 and 2) as the 9-item measure builds on the Norwegian 15-item

measure. Although Nordgård and Farstad (2011) have shortened the Norwegian MTL measure down and increasing the validity of it, the original 15-item measure developed by Øyvind Martinsen and Jan Ketil Arnulf were used at both time 1 and time 2, in order to be able to compare the results over time. Despite the limitations to the measure, and the fact that some of the cronbach's alpha values are quite low (Affective-Identity MTL,  $\alpha$  .45, Non-Calculative MTL,  $\alpha$  .67, Social-Normative MTL,  $\alpha$  .62), the Norwegian measure does encompass both strengths and weaknesses. It is therefore important to keep in mind that its results should be treated with caution, as this is a measure that has been modified and there are indications that the measure do not measure what is actually is intended to do.

Another limitation concerns the sample of this study, which represents individuals of a relatively young age ( $M=25.86$ ), and with a similar educational background. The results provide us with interesting, but yet some surprising results that to a certain degree contradict previous findings of the subject of leader emergence (Judge et al. 2002). Though the study aims to investigate what factors influence leader emergence, its all over generalizability will be limited due to the respondents' age, education level, and experience that is likely to have affected the results in this study.

In the light of the present results, there is a call for further research of factors that may influence leader emergence. The current results propose interesting directions for further investigation of what motivates and what type of environmental experiences that to the greatest extent may predict leader emergence. It would therefore be interesting to further examine how the MTL and Self-Efficacy are influenced by variables such as length of service and leadership experiences when possessing a leadership role over time.

It would also be of interest to examine if there exists other factors beyond Personality, MTL, Self-Efficacy and Age that influence the emergence into leadership positions. As the results of this study indicate, there are most likely other variables that have had an impact of leader emergence, and the question of whether previous experience might be of relevance have been addressed. Experiences of various kinds may be related to all of the variables examined in

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this study, and it might therefore be that experiences may have implications for the emergence leaders.

Lastly, another departure for future research of this longitudinal design would be to further examine whether the individuals who emerge into leadership positions become efficient or not, and investigate what potential factors that lead to different outcomes of effectiveness.

### **Implications and Conclusion**

Despite the limitations in this study it still has interesting implications for both theory and practice. The study contributes to the existing literature by providing a broader understanding of how the variables Personality, MTL, Self-Efficacy, Age and Gender influences Leader Emergence, and whether there exists significant differences between leaders and non-leaders. Personality was not found to be as an important predictor of leader emergence as found in previous studies (Judge et al. 2002), insinuating that there are likely to be other factors that may be of greater influence in young individuals. MTL, and especially the component of Affective Identity, was found to be of importance, as it was discovered to both have a direct relationship with Leader Emergence, mediate the relationship between Personality and Leader Emergence, as well as being a component within young individuals in a leadership position. Though the Social-Normative MTL was not found to have a significant relationship with young leaders, it is likely that this may change over time and through experience, as MTL has been found to be a dynamic construct that are changeable through processes of social learning and experience (Chan and Drasgow 2001). When testing whether young leaders score higher on Self-Efficacy than non-leaders, the results were somewhat contradicting as it was revealed that there was significant differences in the scores, though Self-Efficacy was not found to be a significant predictor of Leader Emergence. This may imply that age and experience may be an important factor that should be considered and may change the Self-Efficacy over time as these factors are dynamic and alter through life.

Taking the results to a more practical level, the results can help practitioners and organizations that are interested in finding and developing leaders from a young age. By combining an individual's interest in leadership and desire to lead one may

be able to trigger the motivation towards leadership from an early age. As the leadership experience of young individuals usually are low, and self-efficacy have been closely linked to leadership (Judge et al. 2007: Hendricks and Payne 2007: Chen and Drasgow 2001), it could be beneficial to make the development and training programs more leadership specific, as this can provide the young individuals with leadership experiences and a development of self-efficacy. By making individuals prepared for what is expected of them in a leader role, the persons will be more aware of potential challenges and pitfalls. Not only will the individuals be more experienced to handle difficult situations, they may also attain a higher belief that one can master such tasks, which again may increase their motivation.

In conclusion, even though personality have been found to be a valid predictor of leader emergence (Judge et al. 2002), this study have exposed that there are likely to be other factors that may be of equal or greater influence. Affective-Identity MTL is found to be highly relevant in the prediction of young leaders, indicating that it is crucial to have a desire to lead. Age was found to have a strong influence on Leader Emergence in this study, in which insinuates that the amount of experience are likely to be of influence on leader emergence, as young individuals tend to lack experiences, especially specific leadership experiences. This points in the direction that leadership is a developed and learned skill and that there are other undiscovered factors in the relationships between the variables that are yet to be further explored.

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## References

- Allport, Gordon W. 1961. *Pattern and Growth in Personality*. Great Britain: Holt, Rinehart and Winston, Inc.
- Alvesson, Mats and Stefan Sveningsson. 2003. "The great disappearing act: difficulties in doing "leadership"." *The Leadership Quarterly*, 14: 359-381.
- Arvey, Richard D., Maria Rotundo, Wendy Johnson, Zhen Zhang, Matt McGue. 2006. "The determinants of leadership role occupancy: Genetic and personality factors." *The Leadership Quarterly*. 17 :1-20
- Arvey, Richard D., Zhen Zhang, Bruce J. Avolio and Robert F. Krueger. 2007. "Developmental and Genetic Determinants of Leadership Role Occupancy Among Women." *Journal of Applied Psychology*, 92(3): 693-706.
- Bandura, Albert. 1997. *Self-efficacy: The exercise of control*. New York: Freeman & Co.
- Bandura, Albert. 1977. Self-efficacy: Toward a Unifying Theory of Behavioral Change. *Psychological Review*, 84(2): 191-215.
- Benjamin, Beth and Charles O'Reilly. 2011. "Becoming a Leader: Early Career Challenges Faced by MBA Graduates." *Academy of Management Learning & Education*, 11(3): 452-472.
- Bijleveld, Catrien C. J. H., Leo J. Th. van der Kamp, Ab Mooijaart, Willem A. van der Kloot, Rien van der Leeden and Eeke van der Burg. 1998. *Longitudinal Data Analysis, Designs Models and Methods*. London: SAGE Publications Ltd.
- Bobbio, Andrea and Anna Maria Manganelli Rattazzi. 2006. "A Contribution to the Validation of the Motivation to Lead Scale (MTL): A Research in the Italian Context." *Leadership*, 2(1): 117-129.
- Buchanan, David A., and Andrzej A. Huczynski. 2010. *Organizational Behaviour*. Harlow:Financial Times/Prentice Hall.
- Carver, Charles S. and Michael F. Scheier. 2008. *Perspectives of Personality*. 6<sup>th</sup> edition. United States of America: Pearson Education, Inc.
- Chan, Kim-Yin and Fritz Drasgow. 2001. "Toward a Theory of Individual Differences and Leadership: Understanding the Motivation to Lead." *Journal of Applied Psychology*, 86(3): 481-498.
- Chen, Gilad, Stanley Gully and Dov Eden. 2001. Validation of a new general Self-efficacy Scale. *Organizational Research Methods*, 4. 62-83.

- 
- Conger, Jay A. 2004. "Developing Leadership Capability: What's inside the Black Box?" *Academy of Management Executive*, 18 (3): 136-139.
- Cooper, Colin. 2010. *Individual Differences and Personality*. 3<sup>rd</sup> edition. London: Hodder Education
- Costa, Paul T. and Robert R. McCrae. 1992. *Revised NEO personality Inventory: Professional manual*. Odessa, Fl.: Psychological Assessment Resources, Inc.
- Cowley, William Harold. 1931. Three distinctions in the study of leaders. *Journal of Abnormal and Social Psychology*. 26: 304-313.
- Derue, Scott D., Jennifer D. Nahrgang, Ned Wellman and Stephen E. Humphrey. 2011. "Trait and behavioral theories of leadership: An integration and meta-analytic test of their relative validity". *Personnel Psychology*, 64: 7-52.
- Digman, John M. 1989. "Five robust trait dimensions: Development, stability, and utility." *Journal of Personality*, 57: 195-214.
- Eden, Dov. 1988. Pygmalion, goal setting, and expectancy: Compatible ways to raise productivity. *Academy of Management Review*, 13(4): 639-652.
- Fishbein, Martin and Icek Ajzen. (1975). *Belief, attitude, intention and behavior: an introduction to theory and research*. Reading, Mass: Addison-Wesley.
- Goldberg, Lewis R. 1990. "An alternative "description of personality": The Big-Five factor structure." *Journal of Personality and Social Psychology*, 59: 1216-1229.
- Hendricks, Joseph W. and Stephanie C. Payne. 2007. "Beyond the Big Five: Leader Goal Orientation as a Predictor of Leadership Effectiveness". *Human Performance*, 20(4): 317-343.
- Hong, Ying, Victor M. Catano and Hui Liao. 2010. "Leader emergence: the role of emotional intelligence and motivation to lead." *Leadership & Organization Development Journal*, 32(4): 320-343.
- Ilies, Remus, Megan W. Gerhardt and Huy Le. 2004. "Individual Differences in Leadership Emergence: Integrating Meta-Analytic Findings and Behavioral Genetics Estimates". *International Journal of Selection and Assessment*, 12(3): 207-219.

- 
- Judge, Timothy A, Amir Erez and Joyce E. Bono. 1998. The power of being positive: The relation between positive self-concept and job performance. *Human Performance*, 11(2/3): 167-187.
- Judge, Timothy A., Christine L. Jackson, John C. Shaw, Brent A. Scott and Bruce L. Rich. 2007. "Self-Efficacy and Work-Related Performance: The Integral Role of Individual Differences". *Journal of Applied Psychology*, 92(1): 107-127.
- Judge, Timothy A, Edwin A. Locke and Cathy C. Durham. 1997. The dispositional causes of job satisfaction: A core evaluations approach. *Research in Organizational Behavior*, 19: 151-188.
- Judge, Timothy A., Joyce E. Bono, Remus Ilies and Megan W. Gerhardt. 2002. "Personality and Leadership: A Qualitative and Quantitative Review". *Journal of Applied Psychology*, 87 (4): 765-780.
- Judge, Timothy A, Ronald F. Piccolo and Tomek Kosalka. 2009. "The bright and dark sides of leader traits: A review and theoretical extension of the leader trait paradigm." *The Leadership Quarterly*, 20: 855-875.
- Kane, Thomas D., Stephen J. Zaccaro, Trueman R. Tremble Jr. and Aline D. Masuda. "An examination of the leader's regulation of Groups". *Small Group Research*, 33(): 65-120.
- Kerlinger, Fred N. and Howard B. Lee. 2000. *Foundations of behavioral research*. 4.th ed. Forth Worth, TX: Harcourt College.
- Langston, Christopher A., W. Eric Sykes. 1997. "Beliefs and the Big Five: Cognitive bases of broad individual differences in personality". *Journal of Research in Personality*, 31(2): 141-165.
- Loehlin, John C., Robert R. McCrae, Paul T. Costa Jr. and Oliver P. John. 1998. "Heritabilities of common and measure-specific components of the Big Five personality factors." *Journal of Research in Personality*, 32(4): 431-453.
- McCrae, Robert R. 1987. "Creativity, divergent thinking, and openness to experience." *Journal of Personality and Social Psychology*, 52: 1258-1265.
- McCrae, Robert M. and Paul T. Costa. 2004. "A contemplated revision of the NEO Five-Factor Inventory." *Personality and Individual Differences*, 36(3): 587-596.
-

- 
- Martinsen, Øyvind Lund, Hilmar Nordvik and Laila Eriksen Østbø. 2011. "The NEO PI-R in a North European Context." *Scandinavian Journal of Organizational Psychology*, 3(2): 58-75.
- Nordgård, Benjamin and Christian Winter Farstad. "A Contribution to the Validation of the Motivation to Lead Scale (MTL): A research in a Norwegian Context". Master Thesis, BI Norwegian Business School, 2011.
- Passer, Michael W. and Ronald E. Smith. 2007. *Psychology, The Science of Mind and Behavior*. 3<sup>rd</sup> edition. New York: The McGraw-Hill Companies, Inc.
- Podsakoff, Philip M, Scott B. MacKenzie, Jeong-Yeon Lee and Nathan P. Podsakoff. 2003. Common Method Biases in Behavioral Research: A Critical Review of the Literature and Recommended Remedies. *Journal of Applied Psychology*, 88(5): 879-903.
- Riegel, Klaus. 1975. "Adult life crises: A dialectical interpretation of development." In *Life-span developmental psychology: Normative life crises*, edited by Nancy Datan and Leon H. Ginsberg, 99-128. New York: Academic Press.
- Saks, Alan M. 1995. Longitudinal field investigation of the moderating and mediating effects of self-efficacy on the relationship between training and newcomer adjustment. *Journal of Applied Psychology*, 80(2): 211-225.
- Shelton, Suzanne H. 1990. Developing the construct of general self-efficacy. *Psychological reports*, 66(3): 987-99
- Sosik, John J., Surinder S. Kahai and Bruce J. Avolio. 1998. "Transformational leadership and dimensions of creativity: Motivating idea generation in computer-mediated groups." *Creativity Research Journal*, 11: 111-121.
- Stajkovic, Alexander D. and Fred Luthans. 1998. Self-efficacy and work-related performance: A meta-analysis. *Psychological Bulletin*, 124(2): 240-261.
- Stogdill, Ralph Melvin. 1974. *Handbook of Leadership*. New York: Free Press.
- Tabachnick Barbara, G. and Linda S. Fidell. 2007. *Using Multivariate Statistics*. Fifth edition. USA: Pearson International Edition.
- Triandis, Harry C. 1980. "Value, Attitudes and Interpersonal Behavior". In *Beliefs, Attitudes and Values: Nebraska Symposium on Motivation*, Edited by Monte M. Page, Lincoln, 195-259, NE: University of Nebraska.
- Van der Kamp, Leo J. Th. and Catrien C. J. H. Bijleveld. 1998. "Methodological Issues in longitudinal research." In *Longitudinal Data Analysis, Designs*
-



---

*Models and Methods*, Edited by Bijleveld, Catrien C. J. H., Leo J. Th. van der Kamp, Ab Mooijaart, Willem A. van der Kloot, Rien van der Leeden and Eeke van der Burg, 2-44. London: SAGE Publications Ltd.

Yukl, Gary. 2010. *Leadership in Organizations*. New Jersey: Pearson Education Inc.

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## Appendix 1

### Questionnaire: Leader Emergence

#### Innledningstekst:

Dette er en oppfølging av forskningsprosjektet om kartlegging av tidlige karrierer, som du takket ja til å være med på da du studerte på BI. Målet med undersøkelsen er å undersøke i hvilken grad utdannelse, personlighet, motivasjon og erfaringer påvirker karriere og valg av jobb. Resultatene vil bli brukt i en sammenheng som vil øke forståelsen av hvordan disse variablene påvirker hverandre. Dataene vil også være utgangspunktet for en masteroppgave, og videre forskning evt publisert artikkel.

#### 1. Nåværende jobb (Den jobben som tar mest av din tid og/eller er din viktigste inntektskilde):

##### a. Type stilling

*Min nåværende stilling er:*

- *Heltid*
- *Deltid*

*Min nåværende stilling er:*

- *Ingen lederjobb*
- *Leder med fagansvar uten personalansvar (for eksempel produksjef)*
- *Teamleder*
- *Avdelingsleder*
- *Enhetsleder*
- *Divisjonsleder*
- *Medlem av toppledergruppen*
- *Virksomhetens toppleder*

*Jeg har grunnlagt den bedriften jeg jobber i:*

- *Ja*
- *Nei*

*Jeg (med)eier den bedriften jeg jobber i:*

- *Ja*
- *Nei*

##### b. Ansvarsforhold

*Har du i dag:*

- *Budsjett og resultatansvar*
- *Mulighet til å ansette og si opp medarbeidere*
- *Ikke ansvar for andre enn meg selv*

*Hvis leder:*

*Jeg har lederansvar for:*

- 1 – 5 medarbeidere
- 6 – 12 medarbeidere
- 13 – 20 medarbeidere
- 21 - 49 medarbeidere
- 50 medarbeidere eller flere

*Hvis leder:*

*Møtet med ledelse i praksis har vært:*

- *Lettere enn ventet*
- *Omtrent som ventet*
- *Vanskeligere enn ventet*

*Mine lederutfordringer er preget av:*

- *Jeg har nesten ikke fått prøvd meg*
- *Jeg har fått passe store utfordringer*
- *Jeg har opplevd situasjoner som jeg ikke mestret*

c. Sammenheng med utdanning

*Er din formelle utdanning relevant i din nåværende stilling?*

- *Veldig relevant*
- *Relevant*
- *Verken eller*
- *Mindre relevant*
- *Irrelevant*

d. Mestringsopplevelse

*Har du en opplevelse av mestring i din nåværende jobb?*

- *Ja*
- *Nei*
- *Litt*

e. Lønnsnivå

*Min årlige lønn er i dag er mellom:*

- *250.000 – 400.000 NOK*
- *400.000 – 500.000 NOK*
- *500.000 – 700.000 NOK*
- *700.000 NOK eller høyere*

## **2. Søkeatferd forut for nåværende jobb**

a. Søkeatferd.

*Jeg fikk min nåværende stilling ved:*

- *Aktiv søknad og utvelgelsesprosess*

- 
- *Jeg ble bedt om å søke*
  - *Jeg ble headhunted*
  - *Jeg ble tilbudt jobben direkte*
  - *Jeg laget jobben selv*
  - *Jeg jobber i min egen bedrift*

*Når du har søkt arbeid, hvilke tilgjengelige kanaler har du benyttet deg av?*

- *Jobb søknad*
- *Linked In*
- *Andre sosiale media*
- *BI Alumini*
- *Dine forbindelser utenfor digitale medier*
- *Andre*

*Den opplevde energien brukt på å søke nåværende jobb var:*

- *Veldig lite energi*
- *Lite energi*
- *Moderat energi*
- *Mye energi*
- *Meget mye energi*

**b. Tidligere jobberfaring**

*Jeg har tidligere jobberfaring fra organisasjonen jeg nå jobber i:*

- *Ja*
- *Nei*

*Jeg har erfaring med lederansvar fra tidligere gjennom (flere alternativer mulig):*

- *Ubetalte verv i frivillige organisasjoner inkl politiske partier*
- *Student- og elevforeninger*
- *Betalte lederoppgaver i jobben*
- *Tillitsvalgt i arbeidstakerorganisasjon*
- *Jeg har ikke tidligere erfaring med lederansvar*

**3. Hva jeg liker i min nåværende jobb (kryss av på flere):**

- *Lønn*
- *Utfordringer*
- *Læringsmuligheter*
- *Sosialt miljø*
- *Muligheten til å reise*
- *Muligheten til å utvikle karriere*
- *Prestisje/ Sosial status*
- *Andre fordeler i jobben*

**4. Utfordringer i nåværende jobb**

- a. *Faglige utfordringer oppleves som*
- *Meget høye*

- *Høye*
- *Middels*
- *Lave*
- *Meget lave*

b. Jeg kommer overens med mine medarbeidere i

- *Meget høy grad*
- *Høy grad*
- *Middels grad*
- *Lag grad*
- *Meget lav grad*

c. Jeg opplever at interne konflikter preger hverdagen min på jobben i

- *Meget høy grad*
- *Høy grad*
- *Middels grad*
- *Lav grad*
- *Meget lav grad*

d. De største belastningene i jobben kan kategoriseres som (flere alternativer mulig) :

- *Finansielle krav fra organisasjonen*
- *Eksposering mot medier*
- *Jobben er (periodevis) for lett*
- *Jobben er (periodevis) for vanskelig*
- *Emosjonelle*
- *Fysiske helseplager*
- *Andre, spesifiser (åpent felt):*

e. I hvilken grad når jeg mine resultatmål/krav?

- *Meget høy grad*
- *Høy grad*
- *Middels grad*
- *Lav grad*
- *Meget lav grad*

## **5. Opplevd grad av støtte til utvikling i nåværende jobb**

a. Støtte fra sjef

- *Meget høy*
- *Høy*
- *Middels*
- *Lav*
- *Meget lav*

b. Kollegastøtte

- *Meget høy*
- *Høy*

- 
- *Middels*
  - *Lav*
  - *Meget lav*

c. Gjennomførte utviklingsaktiviteter

*Jeg har hatt:*

- *Et eller flere lederutviklingsprogrammer*
- *Enkeltstående kurs for å bli en bedre leder*
- *Jeg har hatt en eller flere mentorer*
- *Jeg har mottatt coaching*
- *Jeg har ikke deltatt på noen lederopplæring etter at jeg sluttet på skolen.*

d. Tilbud av utviklingsmuligheter

*Jeg får tilbud gjennom jobben om*

- *Kurs*
- *Lederutviklingsprogrammer*
- *Mentoring*
- *Coaching*
- *Fysisk trening i jobben/privat*
- *Ingen eller få utviklingsmuligheter tilbys gjennom jobben*

**6. MTL**

a. *Oftest foretrekker jeg å være leder framfor medarbeider i gruppearbeid.*

- *Meget høy grad*
- *Høy grad*
- *Middels grad*
- *Lav grad*
- *Meget lav grad*

b. *Jeg den typen person som ikke er interessert i å lede andre. (reversert)*

- *Meget høy grad*
- *Høy grad*
- *Middels grad*
- *Lav grad*
- *Meget lav grad*

c. *Jeg er en personlighetstype som liker å ha ansvar for andre.*

- *Meget høy grad*
- *Høy grad*
- *Middels grad*
- *Lav grad*
- *Meget lav grad*

d. *Jeg tror jeg kan bidra mer til en gruppe som medarbeider enn som leder. (reversert)*

- *Meget høy grad*
- *Høy grad*
- *Middels grad*
- *Lav grad*
- *Meget lav grad*

- e. *Jeg har en tendens til å ta ansvaret i de fleste grupper som jeg jobber i.*
- *Meget høy grad*
  - *Høy grad*
  - *Middels grad*
  - *Lav grad*
  - *Meget lav grad*
- f. *Jeg er bare interessert i å være gruppeleder dersom det er klare fordeler ved det for meg.*
- *Meget høy grad*
  - *Høy grad*
  - *Middels grad*
  - *Lav grad*
  - *Meget lav grad*
- g. *Jeg ville gå med på å lede andre selv om det ikke følger noen spesiell belønning eller fordeler med den rollen. (reversert)*
- *Meget høy grad*
  - *Høy grad*
  - *Middels grad*
  - *Lav grad*
  - *Meget lav grad*
- h. *Jeg vil vite "hva som er i det for meg" hvis jeg går med på å lede en gruppe.*
- *Meget høy grad*
  - *Høy grad*
  - *Middels grad*
  - *Lav grad*
  - *Meget lav grad*
- i. *Hvis jeg går med på å lede en gruppe vil jeg aldri forvente noen fordeler eller spesielle belønninger. (reversert)*
- *Meget høy grad*
  - *Høy grad*
  - *Middels grad*
  - *Lav grad*
  - *Meget lav grad*
- j. *Jeg har mer av mine egne problemer å bekymre meg om enn å bry meg med resten av gruppa.*
- *Meget høy grad*
  - *Høy grad*
  - *Middels grad*
  - *Lav grad*
  - *Meget lav grad*
- k. *Jeg føler meg forpliktet til å lede andre hvis jeg blir spurt.*
- *Meget høy grad*
  - *Høy grad*
  - *Middels grad*

- 
- *Lav grad*
  - *Meget lav grad*

*l. Jeg har blitt lært opp til alltid å melde meg frivillig som leder hvis jeg kan.*

- *Meget høy grad*
- *Høy grad*
- *Middels grad*
- *Lav grad*
- *Meget lav grad*

*m. Det er ikke riktig å si fra seg lederroller.*

- *Meget høy grad*
- *Høy grad*
- *Middels grad*
- *Lav grad*
- *Meget lav grad*

*n. Det er en ære og et privilegium å bli bedt om å lede.*

- *Meget høy grad*
- *Høy grad*
- *Middels grad*
- *Lav grad*
- *Meget lav grad*

*o. Folk burde melde seg frivillig for å lede, heller enn å vente på at andre skal spørre eller stemme på dem.*

- *Meget høy grad*
- *Høy grad*
- *Middels grad*
- *Lav grad*
- *Meget lav grad*

## **7. Fremtidsperspektiver**

a. Turnoverintensjon

*Jeg har et ønske om å bytte jobb:*

- *Ja*
- *Nei*

*Hvis ja, hvorfor:*

- *Jeg vil ha større faglige utfordringer*
- *Jeg vil ha større ledelsesmessige utfordringer*
- *Jeg vil ha bedre betalt*
- *Belastningen i min nåværende jobb er for stor*
- *Annet, (kommentarfelt)*

b. Min neste jobb bør inneholde:

- *Mer lederansvar*
- *Mindre lederansvar*
- *Mer personalansvar*



- *Mindre personalansvar*
- *Høyere/lavere ansvarsnivå*
- *Mer/mindre anledning til faglig fordypning*
- *Jeg ønsker å starte en ny bedrift selv*

## 8. Generell self-efficacy

- a. Jeg vil være i stand til å nå de fleste av målene jeg setter meg
  - *Helt enig*
  - *Enig*
  - *Nøytral*
  - *Uening*
  - *Helt uenig*
- b. Jeg mestrer vanskelige oppgaver
  - *Helt enig*
  - *Enig*
  - *Nøytral*
  - *Uening*
  - *Helt uenig*
- c. Som oftest tror jeg at jeg er i stand til å oppnå resultater som er viktige for meg
  - *Helt enig*
  - *Enig*
  - *Nøytral*
  - *Uening*
  - *Helt uenig*
- d. Jeg tror jeg vil lykkes med det meste hvis jeg går inn for det
  - *Helt enig*
  - *Enig*
  - *Nøytral*
  - *Uening*
  - *Helt uenig*
- e. Jeg vil overvinne de fleste utfordringer jeg møter på med suksess.
  - *Helt enig*
  - *Enig*
  - *Nøytral*
  - *Uening*
  - *Helt uenig*
- f. Jeg føler meg sikker på at jeg er i stand til å effektivt utføre mange forskjellige typer oppgaver
  - *Helt enig*
  - *Enig*
  - *Nøytral*
  - *Uening*
  - *Helt uenig*

- 
- g. Sammenlignet med andre, så kan jeg utføre de fleste oppgaver meget godt
- *Helt enig*
  - *Enig*
  - *Nøytral*
  - *Uening*
  - *Helt uenig*
- h. Selv når ting er vanskelig, kan jeg prestere relativt godt
- *Helt enig*
  - *Enig*
  - *Nøytral*
  - *Uening*
  - *Helt uenig*

## 9. Avsluttende Kommentar

Dersom du er leder og kunne tenke deg en oppfølging av oss, trykk her:

- a. Ønsker du at vi skaffer deg en lederevaluering fra folk omkring deg?  
Dersom du legger inn e-post-adressen din her kan vi komme tilbake med et tilbud om 360-graders tilbakemelding.

## Appendix 2

### Cover letter

### **Subject: HVA ER DINE ERFARINGER I JOBBEN?**

#### BIs LEDERKARRIEREPROSJEKT

I 2006 eller 2007 takket du ja til å delta i en såkalt longitudinelle undersøkelse, der vi ville følge opp BI-studenter hvert 5. år i deres vei gjennom studier og jobb. Hensikten er å følge mange personer over flere år, slik at man har sikrere grunnlag for å si noe om årsak og virkning i karrierevalg, lederstil og ledereffektivitet.

Det er nå 5-6 år siden du deltok sist, og vi vil gjerne vite litt om hva du gjør nå, dine erfaringer og hvordan/hva du tenker omkring dette. Lenken nedenfor fører deg fram til et kort spørreskjema om situasjonen din nå og dine tanker om utfordringer i jobben og ledelse i dag. Det er mye kortere enn sist og tar mellom 10 og 15 minutter å fylle ut.

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([lenke til spørreskjemaet](#))

Som takk for at fyller ut skjemaet får du en **rapport om karrieresituasjonen for ditt kull**, sendt på e-post etter at undersøkelsen er avsluttet og vi får litt tid til å bearbeide den. *Et spesielt tilbud til interesserte i år er at de som ønsker kan si fra til oss, så vil vi innhente såkalt "flerkilde-tilbakemelding" eller 360 graders tilbakemelding på ledelse. De som ønsker å være med vil få tilsendt en rapport om egen lederstil slik den oppleves av andre, og inviteres til et halvdags seminar der vi diskuterer hvordan dette skal fortolkes.*

BI ønsker å fortsette å følge noen av sine studenter gjennom deler av yrkeskarrieren. I praksis betyr dette av vi ønsker å ta kontakt med deg hvert 5.år, og så lenge som mulig – kanskje i 15 år framover (til sammen 3 ganger). Som takk for din deltakelse vil du motta tilbakemeldinger på egne tester, rapporter om ledelse og karriereutvikling og invitasjon til seminarer om disse temaene underveis.

Dataene skal bare brukes til forskning, og enkeltpersoner vil ikke være synlige i rapporter og publikasjoner (anonym behandling). Vi gjør oppmerksom på at all deltakelse er frivillig, og at vi plikter å slette informasjon om deg senere dersom du krever dette.

Vi takker på forhånd for ditt bidrag, og håper at vi sammen kan skape ny kunnskap om ledelse.

Med vennlig hilsen:

Professor Øyvind L. Martinsen (oivind.martinsen@bi.no)

Førsteamanuensis Jan Ketil Arnulf (jan.k.arnulf@bi.no)

## Appendix 3

### Reminders

**Til de som har begynt, men ikke fullført:**

Hei,

Vi viser til vår henvendelse til deg forrige uke vedrørende BIs forskning på ledelse og lederkarrierer. Det kan virke som om du har begynt å svare på undersøkelsen, men ga deg før den var ferdig. For oss er det viktig å få så mange respondenter som mulig, og vi ville bli veldig glade hvis du kunne tenke deg å fullføre skjemaet. Skulle du fortsatt være student, men ha en deltidsjobb, er vi fortsatt interessert i ditt svar. Dersom dette er tilfelle, kan du krysse av for deltidsarbeid i undersøkelsen. Hvis du klikker på lenken nedenfor, kan du bare fortsette der du slapp - du behøver ikke starte på begynnelsen igjen!

[^seureslink^](#)

**Husk at du, som takk for at du fyller ut skjemaet, får tilbud om en 360 graders evaluering/flerkilde evaluering.**

Dataene i undersøkelsen skal bare brukes til forskning, og enkeltpersoner vil ikke være synlige i rapporter og publikasjoner (anonym behandling). Vi gjør oppmerksom på at all deltakelse er frivillig, og at vi plikter å slette informasjon om deg senere dersom du krever dette. Linken er personlig og bør ikke overdras til andre.

Vi takker på forhånd for ditt bidrag, og håper at vi sammen kan skape ny kunnskap om ledelse.

Med vennlig hilsen

**Til de som ikke har svart:**

Hei,

Vi viser til vår henvendelse til deg forrige uke vedrørende BIs forskning på ledelse og lederkarrierer. Over 300 studenter har til nå respondert - vi trenger imidlertid minst 700 til for å komme i havn med grunnlaget for det langsiktige studiet. Vi ber deg derfor om å sette av 15 minutter til å svare på spørsmål om din

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nåværende jobb situasjon, dine personlige preferanser og motivasjon for å lede. Lenken nedenfor fører deg fram til spørreskjemaet. Har du allerede begynt, men ikke fullført, kan du bare fortsette der du slapp.

[^seureslink^](#)

**Husk at du, som takk for at du fyller ut skjemaet, får tilbud om en 360 graders evaluering/flerkilde evaluering.**

Dataene i undersøkelsen skal bare brukes til forskning, og enkeltpersoner vil ikke være synlige i rapporter og publikasjoner (anonym behandling). Vi gjør oppmerksom på at all deltakelse er frivillig, og at vi plikter å slette informasjon om deg senere dersom du krever dette. Linken er personlig og bør ikke overdras til andre.

Vi takker på forhånd for ditt bidrag, og håper at vi sammen kan skape ny kunnskap om ledelse.

Med vennlig hilsen

**Siste purring:**

Hei,

Vi viser til vår henvendelse til deg vedrørende BIs forskning på ledelse og lederkarrierer. Vi er veldig nær vårt mål om 1000 studentresponser og ber deg en siste gang om å hjelpe oss i havn med grunnlaget for det langsiktige studiet. Din deltakelse betyr mye siden dette er et lite utforsket område. Vi ber deg derfor om å sette av 15 minutter til å svare på spørsmål om din nåværende jobb situasjon, dine personlige preferanser og din motivasjon for å lede deg selv og andre.

**Husk at du, som takk for at du fyller ut skjemaet, får tilbud om en 360**

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**graders evaluering/flerkilde evaluering.**

Undersøkelsen stenger ....

Lenken nedenfor fører deg fram til et spørreskjema. Har du allerede begynt, men ikke fullført, kan du bare fortsette der du slapp.

[^seureslink^](#)

Dataene i undersøkelsen skal bare brukes til forskning, og enkeltpersoner vil ikke være synlige i rapporter og publikasjoner (anonym behandling). Vi gjør oppmerksom på at all deltakelse er frivillig, og at vi plikter å slette informasjon om deg senere dersom du krever dette. Linken er personlig og bør ikke overdras til andre.

Vi takker på forhånd for ditt bidrag, og håper at vi sammen kan skape ny kunnskap om ledelse.

Med vennlig hilsen